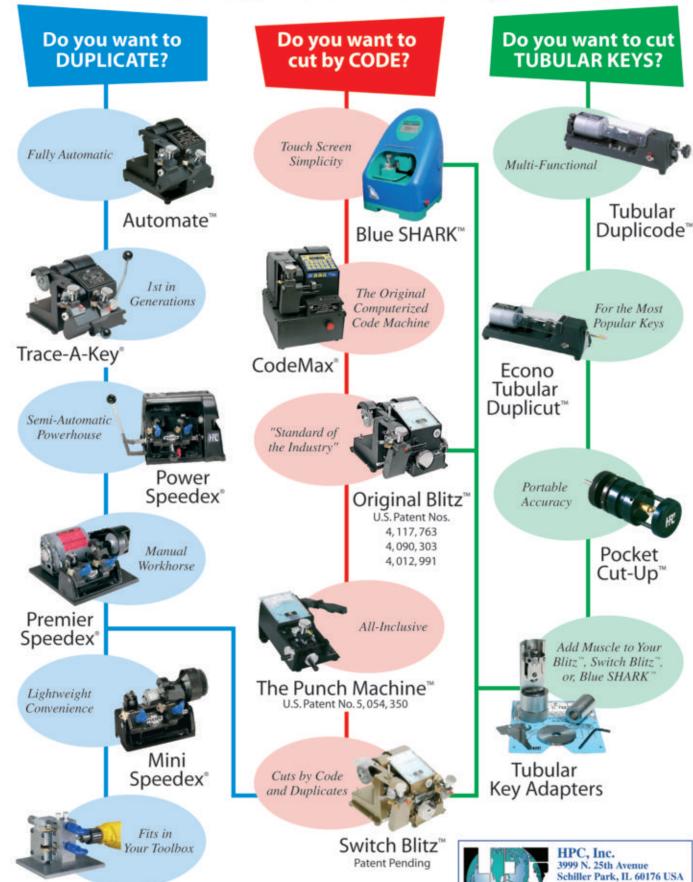
The National ocksmith

The Rolling Collins of the Control o

2005 m

Also inside... **Annual Door Hardware Review!** 

#### Which HPC Key Machine is right for you?



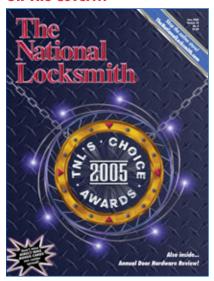
Drill Mill

U.S. Patent No. 6,003,164

Tel: 847.671.6280

Fax: 847.671.6343 www.hpcworld.com

#### On The Cover...



This year's list of what items generated the most interest via reader responses, e-mails, phone calls and The National Locksmith's sense of what's worthy of a TNL Choice Award.

**Publisher** Marc Goldberg Editor Greg Mango Art Director ..... .Jim Darow Technical Editor lake Jakubuwski Sal Dulcamaro CML, Michael Hyde,

Dale Libby CMS, Dave McOmie, Sara Probasco, Robert Sieveking

**Contributing Writers** 

John Blankenship, Tony Blass, Ron & Chris Curry, Mark Daniel, Richard Allen Dickey, Ken Holmlund, Tom Lynch, Tom Mazzone, Randy Mize, Bill Phillips, Tom Seroogy, Steve Young

Director of Sales & Marketing **Advertising Account Manager** 

Jeff Adair

Debbie Schertzing

Accounting Manager .....

Sheila Campo

**Production Assistants...** 

Dave Krofel, Joseph Bonus

Administrative Assistants

LaVerne Schertzing, Chandra Smith

Shipping Manager.....

Allan Galvez

National Publishing Company
The National Locksmith® ISSN #0364-3719 is published monthly by the National Publishing Co., 1533 Burgundy Parkway, Streamwood, Illinois 60107-1861. Periodicals postage paid at Bartlet, Illinois 60107 and additional mailing offices USPS 040110. Subscriptions \$46.00 per year in the USA: \$58.00 per year in Canada; \$72.00 in all other countries. Single copies \$7.00 each. Postmaster, please send change of address to National Publishing Co., 1533 Burgundy Parkway, Streamwood, Illinois 60107-1861.
© 2005 by the National Publishing Company.
All rights reserved. Printed in the U.S.A.







(630) 837-2044 • Fax: (630) 837-1210 E-Mail: natllock@aol.com See us on the World-Wide Web: www.TheNationalLocksmith.com

#### CONTENTS

The National Locksmith®

June 2005 • Vol. 76, No. 6

#### FEATURES

Arrow Lock

Company They don't sell to the big box stores.





 $\Delta \Delta$ OMNILOCK Kevpad And Card Reader Locks Innovative security products.

Residential Locks From Medeco

Raising the bar on home security.



24 Making Keys for the 2004 Lexus RX 330 With T-Code

Featuring a new transponder chip.

**30**.

**Car Opening** 

**Buick LaCrosse and** BMW X3.



TNL's Choice

The most popular items in the previous year.



Literature And **Brochures** 

Free information for the asking.





**52** Door Automation **By Ceco Door Products** 

A whole new way to manufacture steel doors and frames.



Interchangeable Cores Šmall Format

Decoding an I-Core.



Saving Lives Is Good **Business!** 

Gate lock opportunities can generate additional sales.



Wells Fargo Armored Magnum Safe

It looks worse than it is.



108 2003 **Buell** Firebolt XB9R

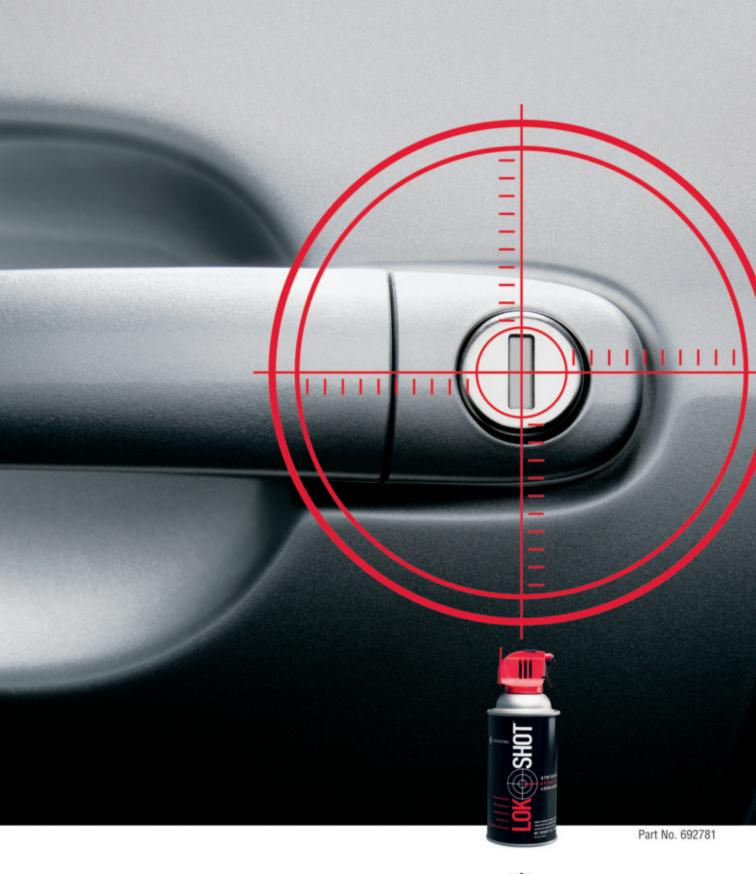
84

There are no codes on this bike.

#### **DEPARTMENTS**

- **Commentary**
- Mango's Message
- Letters
- **Beginner's Corner**

- The Lighter Side
- **Technitips**
- **Business Briefs**
- 120 **Test Drive**



LokShot." The right lube. The right delivery. Lock and load.



#### COMMENTARY

#### Locksmiths Go Hollywood



The night before last I saw the movie *Crash*, which features actor Michael Pena playing a locksmith in Los Angeles. The character in the movie is a locksmith of Mexican heritage, and he plays a very prominent role in the film. Pena comes off very well in the movie, although the lockshop he works for is not portrayed as highly professional.



Actor Michael Pena.

Nonetheless, the locksmith character in *Crash* is very likeable and sympathetic. We do see him on the job, and follow his truck around LA. I won't give away any of the plot twists, but I will recommend you see this movie. Although it's early, I am quite sure you will see this flick nominated for at least one Oscar.

*Crash* follows a seemingly random selection of Angelinos whose paths eventually intersect. Each of the characters has a story to tell and we learn something about all of their lives and working conditions.

The Mexican-American locksmith has to deal with racial prejudice as part of his work. Some of his customers are suspicious that he may be a criminal or gang member. This part of the movie made me stop and wonder if any of you encounter that in your work. Have you heard comments or encountered suspicion while doing your locksmith work? If so, was the cause racial? Or are people just sometimes nervous about our technical abilities? I'd like to hear about YOUR stories if you have been treated this

way by a customer. E mail me details at NATLLOCK@aol.com.

By the way, do you remember the race horse in the UK named Locksmith who I wrote about in a recent issue? Well he's tearing up the race circuit, winning race after race. Maybe this is good news for all of us, or maybe just for those lucky people who have made money from him. These days, Locksmith is a good bet as he burns up the track.

Speaking of heat, Tucson Fire Capt. Paul McDonough was in the news recently reminding people not to lock their children in the car this summer. Seems like painfully obvious advice, but children die each year when

their parents don't want to wake them up while running an errand.
McDonough mentioned that his department will call a locksmith to unlock a car in which a happy, alert child is locked. However, if the child is in any form of distress, they will break into the car.

Enjoy a safe summer.

Man Goldburg

Have questions? Want free technical help? Free Locksmith Forums!

www.TheNationalLocksmith.com

Marc Goldberg
Publisher



#### **Auto Slayer**

very once-in-a-while a story, photograph, or joke crosses my desk that is just a classic. It doesn't happen too often, but when it does it is always memorable.

The following was sent to me by Nicolas Charon, from my home away from home in the Lone Star state of San Antonio, Texas. In fact, my wife and I were just recently in San Antonio visiting family and friends, and there never seems to be enough time to see them all.

This photograph appeared in the San Antonio Express-News newspaper. Headquartered in San Antonio, I am quite familiar with the Express building. I serviced many of the door locks and safes at that location in my day as an active locksmith. When I lived there, two major newspapers (The San Antonio Light and the San Antonio Express-News) in fierce competition fought for their share of the media buying pie. In the end the Express won, and The San Antonio Light is now history, taking with it much of my handy work as well.

As a kid, I remember many a fable of medieval warriors slaying dragons with little more than a sword, a belly full of spirits and courage. Through the ages these fire-breathing behemoths continued to fall till there were no more, and the dragon slayers eventually went out of business.

In an attempt to revive this once noble profession, a new beast is breathing a flame of defiance and irritation, requiring the assistance of these mighty warriors to once again eradicate—the locked car.

Caught on film for the first time ever, you are witnessing the action of just such a warrior slaying a door lock.

Just as before, outfitted with little more than a sword, a belly full of spirits, courage and funny looking designer clothing, this warrior is about to plunge his sword into the belly of the beast, saving the observing damsel in distress. I'll spare you the gruesome aftermath.

Should you ever find yourself in the middle of the Black Forest staring bumper to bumper into the headlights of a beast, fear no more, call an Auto Slayer



today at: (288) 675-2937 (AUTOSLAYER). If the lines are busy just try your call again, operators are standing by.

All city, state and applicable county taxes apply except to residences of Nevada, Delaware and New Mexico.

They won't quit till the last one falls!

П

Dregmango

**Greg Mango** Editor

## Clark's solutions save you time.



- 350 manufacturers and 40,000 plus items.
- Stocking all major product categories:
  - Mechanical
  - Electromechanical
  - Electronic
  - Video Surveillance
- · Quick ship programs.
- Factory certification classes as well as basic and advanced access control system design classes offered locally.
- Regional trade shows with 50-100 manufacturers represented plus the latest and greatest in hands-on training classes.
- 13 warehouses located nationwide.





ANAHEIM	(800) 889-5625
CHICAGO	(800) 755-5625
DALLAS	(800) 483-5625
DENVER	(800) 282-5625

KENTUCKY(800) 659-5625	
NEW ENGLAND(800) 746-5625	
ORLANDO(800) 669-5625	
PHOENIX(800) 775-5625	
SACRAMENTO(800) 245-3003	

SALT LAKE CITY	(800) 453-6430
SAN DIEGO	(800) 542-5625
SEATTLE	(800) 942-5275
WASHINGTON D.C	(800) 578-5625



#### **Technitip Winner**

Thank you so much for naming me one of the year-end prize winners. The nice folks at Strattec have furnished me with a valuable assortment of transponder key blanks, literature and other merchandise.

It is very gratifying to receive such rewards for helping my fellow locksmiths by sharing information on ways to practice our craft.

*The National Locksmith* is the best locksmith magazine out.

Thanks again,

Bobby C. "Bob" Floyd Arkansas

#### Padlock ID Needed

Enclosed are two photographs of a padlock a friend of mine





purchased at a garage sale. Can you direct me to someone who may be able to enlighten us regarding the origin of this padlock and some of its history?

Thank you for your help.

Louis R. Tascott, CPL Hawaii

#### **Enjoy the Magazine**

Thank you for the JKP-5 pick set for my 2-year renewal. I really enjoy reading *The National Locksmith* every month, especially the safe articles. Your magazine tops the competition in every category!

Keep up the good work.

Bill Wakefield

#### What a HUMMER Bummer

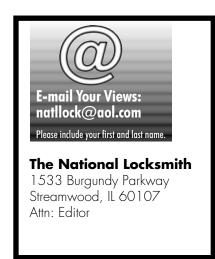
Can somebody do a "How To" on a HUMMER? Seems like

these expensive vehicles are getting more and more popular. I had a Cross Country Roadside call to unlock one 30-miles from my house and I didn't have any idea on what to expect. Thank goodness the driver found his keys and cancelled the call. I have yet to see or read anything on these armor car looking vehicles.

Bob LeMaster Mississippi

Editors Note: Bob, we don't have too many opportunities to service a HUMMER. However, if you are looking for opening information, most vehicle unlock tool suppliers have some opening information in their books, such as PRO-LOK, Lockmasters, High Tech, Slide Lock, Steck Mfg., HPC, Inc, etc.

T/L



# Chance More Chance for Free Money!

Receive a VISA Gift Card worth anywhere from \$50.00 to \$500.00! To be eligible, simply purchase and install the MS® Maglock before August 31, 2005. It's that simple. Just visit our Web site, www.adamsrite.com/visa1 for easy terms and conditions of this special offer.

In addition to the cash, you and your customers will really appreciate the advantages of the MS Maglock. It's one of the smallest, lightest yet strongest maglocks on the market, and our customers are raving about it.

"We currently have Locknetics products in inventory. Once it is gone we will be purchasing the Adams Rite MS1500 Maglock as our standard inventory."

Bob B., Hardware Buyer

"Its strength and small size means it will fit most of my applications. Love the installation templates, and thanks for sending my VISA card so promptly."

Jeff H., Installer

"We are very impressed with this lock and the hospital is too. We will be using these locks much more in the future."

Rich R., Security Company President





## RROV

#### They don't sell to the big box companies



by Sal Dulcamaro, CML

ompetition in the market is tough for just about any industry, or any category of products. It is no different in the lock and door hardware market and lock-smiths have been feeling the pinch for many years now. While locks have been sold for years in the hardware stores, the price competition for locksmiths has not been so criti-

cal until the coming of the super hardware stores. Those retail outlets are often referred to as the "big box" stores. Obviously, locksmiths aren't the only target competition for these stores. Virtually any retailer that sells the same products as those sold in the big box stores has been feeling the pinch.

It gets to be a little bit tricky when your customer tells you that he has been to the big box store and the same lock that you are selling is available from 30 to 50 percent less expensive than you are selling it. It gets even trickier when the lock goes on sale at the big box store and the sale price is sometimes cheaper than the price you pay wholesale. If you tried to sell the lock to your customer at those prices, you would end up losing money rather than just making a smaller profit.

Faced with having to charge more for the same locks to survive, smart locksmiths will sometimes niche market. They will also market the aspect of service or other extra benefits or values received by the customer when buying the same lock at a higher price from a locksmith. Knowledge and experience of a locksmith can direct a customer to the lock most suited to the customer's needs. Still, the bottom line is the bottom line.

Many locksmiths will seek out brands that are not readily available at the big box stores.

That option will keep the customer from making a specific product to product price comparison between the one sold by you compared to the identical one sold by the big box store. There are not many brands left that market primarily to locksmiths and don't sell their products in the big box stores. One of those brands that does focus on the locksmith is well known to most locksmiths. Arrow Lock, which recently moved from urban Brooklyn to rural Hicksville, NY, is one of those companies that focuses on the locksmith. Arrow brand locks are not sold in the big box stores.

In recent years, Arrow has introduced a number of new product lines. Although many of the products are not just recently introduced, they may seem brand new to the locksmiths who have not kept up with the product introductions from Arrow in recent years. Some items that are not from new product lines have been modified or upgraded, and manufacturing processes for some hardware products have been refined or changed to improve overall quality and reliability.

#### **C Series Residential Locks**

The C (Comet) series is not brand new from Arrow, but is probably new to a lot of locksmiths. The C series locks are designed for residential use and light commercial applications. The Comet series includes three knob styles and four lever handle styles. The C series lever designs include Solar, *(photograph 1)*, Orion, *(photograph 2)*, Virgo, *(photograph 3)* and Lunar (not shown). The locks are available in four different finishes: 605/US3 Bright Brass, 609/US5A Satin Brass-

Blackened, 625/US26 Bright Chromium Plated, and 626/US26D Satin Chromium Plated.

The locks are also available in a variety of lock functions including: passage, privacy, patio, dummy trim, entrance and storeroom. The keyed lock functions include the standard "A" keyway for the Arrow lock cylinders. The cylinders have six chambers but are pinned to five. The locks include a latch that is adjustable between 2-3/8" to 2-3/4" backset. The



1. Arrow Solar lock.



2. Arrow Orion lock.



3. Arrow Virgo lock.

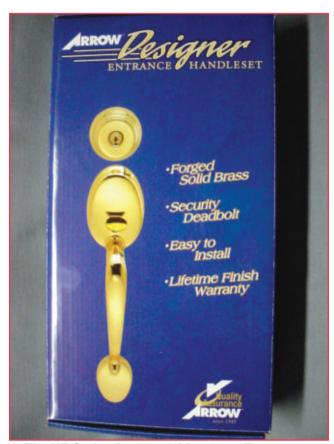
Lunar and Orion levers are handed because of the scroll like design. You will need to know the correct handing of the doors in question to order properly for your customers. The C series locks are attractive and your customer won't find them on sale at half the price at one of the big box stores.

#### **Arrow Designer Entrance Handleset**

The HE-Series Residential Designer Entrance Handleset is a new item from Arrow, *(photograph 4)*. It is non-handed and made of solid forged brass. Besides coming in a 26D brushed chrome finish, the designer handleset is available in a Lifetime Brass finish, *(photograph 5)*. It has a non-locking thumb piece grip handle on the outside and an inside passage knob. The set includes an Arrow E series (Grade 2) deadbolt with a full one-inch throw bolt. They will fit on doors ranging from 1-3/8" to 1-3/4" thick.

#### **Lever Locks**

Arrow makes a variety of commercial grade cylindrical leversets. The M series lever is Grade 2, *(photograph 6)*. It is available in an optional OverDrive version, which has a free turning (without unlatching) outside handle. It is a clutch type lever that engages the latch when the lock is unlocked, but when in locked mode the lever handle still turns (as if unlocked) but the latch won't move.



4. The HE-Series Residential Designer Entrance Handleset.



5. Available in a Lifetime Brass finish.



7. The Q series lever.

The M series cylindrical levers are available in six different finishes: 605/US3 Bright Brass, 606/US4 Satin Brass, 612/US10 Satin Bronze, 613/US10B Dark Oxide Bronze-Oil Rubbed, 625/US26 Bright Chromium Plated, and also 626/US26D Satin Chromium Plated.

The Q series lever is a rugged Grade 1 lock with OverDrive as a standard feature, *(photograph 7)*. It is smartly designed to retrofit to a wide variety of auxiliary hole patterns without having to custom order special additional parts. It is available in three lever handle styles: Broadway, Sierra (handle design in photo), and Ventura. It is also available in the finishes mentioned with the M series levers.

The W series lever is a hybrid heavy-duty lockset that is priced lower than the Q series, *(photograph 8)*. OverDrive is not standard with this lock, but it is available as an option. The W series locksets are available in the same lever handle design styles as the Q series, plus the various finishes.

Arrow also makes a Grade 2 cylindrical lever lock line that is less expensive than the M series. The L series lever handle locks provide a more economic alternative for use in less demanding environments where costs are a bigger consideration. Although a



6. The M series lever.



8. The W series lever.

great emphasis is placed on lever handle locks these days, Arrow still makes a variety of knob handle locks, too.

The range of door hardware from Arrow also includes mortise locks of various styles and functions, exit devices and door closers. Arrow brand deadbolts include the (Grade 2) E series deadbolts and also the (Grade 1) heavy-duty D series deadbolt locks. Both E and D series are available in 7 different lock finishes. The N series auxiliary locks are mortise type deadbolt units with mortise cylinders.

Arrow manufactures a very wide variety of door hardware products, which allows for an equivalent product line to match most of the other brands in the market. Many locksmiths have been looking for brands that they can sell without having to compete against the mega-hardware marketers for price. Beside that element for choosing a brand to sell, locksmiths also like to know that the manufacturer has a broad product line that can meet the needs of his or her customers. The range of product in door hardware is very wide. Arrow makes more than just the door hardware, though; it also makes cylinders. Specifically, in one of the more specialized lock cylinder categories, they manufacture interchangeable core lock cylinders.

#### **Small Format Interchangeable Core**

Arrow lock has been manufacturing Small Format I-Cores for many years. They have, however, in recent years been developing some unique and versatile products. They make standard keyway I-Cores that can be keyed into existing Best or Best compatible master key systems, *(photograph 9)*. Not very long ago, Arrow introduced CHOicE, which is a modular Interchangeable Core System. That started with ChoICe Base, which is a Best style lettered keyway I-Core. ChoICe Flex was a variation of the FlexCore patented key SFIC locking system. ChoICe Plus is a patented key system and is designed for



9. Standard keyway I-Cores.



10. Arrow CholCe Plus.

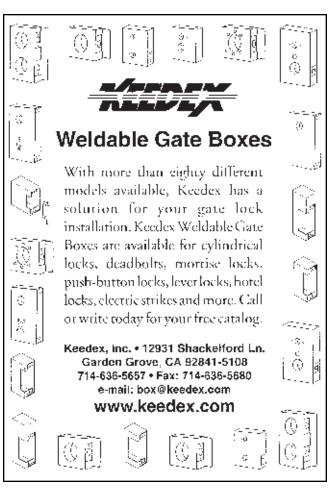


11. One of two core holes not drilled all the way.

greater key control and security, (photograph 10). A backside view shows one of two core holes not drilled all the way through, (photograph 11). The shallow hole on the left (back side view) will prevent the I-Core from entering some conventional I-Core housings. ChoICe HS (not shown) is no longer available. HS stood for high security and that version I-Core included a sidebar.

Arrow has other items in the works for lock hardware and specifically Small Format IC. I'm looking forward to learn more about them as they are introduced. I know a lot of locksmiths who bemoan the fact that most of the lock manufacturers are selling through the big box store retail outlets and not giving locksmiths a chance to buy at prices that would allow them to compete with those mega-retailers. Arrow doesn't distribute their door hardware products through those channels. If you haven't already, maybe you will look at Arrow another time and see if they can meet your needs in an ever more competitive retail market.

For more information, contact: Arrow Lock Company, 325 Duffy Ave., Hicksville, NY 11801. Phone: (516) 704-2700. FAX: (516) 704-2792. Circle 361 on Rapid Reply.





#### **Emergency Response Kit:**

Deluxe soft case, Super Air jack, One Hand jack, Super One Hand Jack, Glass Man, Rubber wedge, Remote control Button Master, Mighty Max 2 piece Long Reach tool, Flexible Long Reach Tool

Sale Price # ERK \$129.95



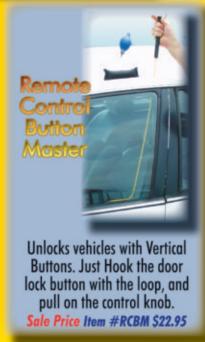
Value Set: Standard Soft Case, Two Volume Car, Truck, and SUV Opening Manuals, 12 Chrome Tools, Tough Wedge, Wedgee Wedge, Strip Savers, Super Strap Tool, Slim Jim, Training Video. Item# AMO4VS- \$119.95





One Hand Jack Set: Shielded Quick Max Long Reach Tool, One Hand Jack Tool, Air Jack Air Wedge, Super Strap Tool, Carrying Case, Sale Price #OHJS4 \$54.95





### Free Stuff with our Master Locksmith Set





- Unlocks Virtually Every Vehicle From a VW Bug To a Mack 18 wheeler
- Most Complete up to date Lockout set on the Market
- 100% money back guarantee!
- Lifetime Tool Replacement Guarantee
- Included 2006 early release vehicles!
- 1600 Page manuals with Photo instructions and Diagrams!
- Includes 30 tools making every opening a fast easy opening

#### FREE Air Jack Air Wedge

The best air wedge on the Market, made from Ballistic Nylon with special Stiffener for easy insertion!

#### Free One Hand Jack Tool

The One Hand Jack™ works in conjunction with our Air Jack to make emergency openings fool Proof!

#### Free Coated Long Reach Tool

Our Long reach tool is exible and Coated with a Scratch free Polymer.

#### Free GlassMan<sup>TM</sup> Tool

Makes unlocking vehicles with fremeless windows and cabled locks quick easy and saie:

#### Free Truck Opening Set

Our exclusive Medium and Heavy Duty Truck opening set, unlock every truck even 18 wheelers

#### Free Information Manual

Our information manual has code information, key blanks, space and depth and more!

#### Free Lock-Out Video

See openings from outside as well as inside the vehicle, nothing else like it anywhere!

ind more!



High tech Tools • 1628 N.W. 28th Street • Miami, FL. 33142 • 305-635-1011 • Fax 305-635-1015 • www.hightechtools.com

## RESIDENTIAL From 0 COCO C



by Richard Allen Dickey

edeco is well known in the security industry. For years they have been a leader in the physical security needs of businesses around the world. Recently they decided to step into the residential arena. What do they have to offer? Well, I want to show you a few of their products. But first here is a little history.

In 1968, the owners and employees of Mechanical Development Company invented a unique locking principle. It consisted of angled key cuts and elevating and rotating pin tumblers. This new idea provided millions of key combinations and a level of security that was unmatched in its time. Medeco was officially formed and immediately set the standard for high security and key control.

Medeco products have become famous for their unique lock technology that resists picking, forced entry, prying, and hammering. The utility patents on the locking technology and keyblanks assures users that their keys will not be duplicated without their authorization.

Medeco provides security solutions for U.S. government and military installations worldwide, schools and universities, hospitals and banks, vending and gaming machines and much more. They offer a vast retrofit capability that offers mechanical and patent protected key control.

All Medeco locks are manufactured in Salem, Virginia, with handcrafted, solid brass construction. Medeco takes pride in producing a high quality lock made in America. Now lets get back to the residential stuff!

Their residential security products are the highest quality I have seen in my years in the industry. My favorite product is the Tara handleset with egg knob, (see photograph 1). The satin nickel is also

my favorite finish. This is a very heavy handleset. Just lifting it in your hand gives a sense of quality.

To go with the handleset is an integrated, Grade 1 deadbolt that is equally heavy. The deadbolt is held together with large cap screws, (see photograph 2). When assembled the cap screws are hidden from view by a special plate and a retainer ring.

The trim ring that is on the inside as well as the outside is a solid chunk of metal, (see photographs 3). It is designed to completely cover the outside edges of the lock cylinder. This provides excellent protection and prevents the lock cylinder from being rotated by vandals.

The bottom attachment for the handleset is a well thought out, decorative cover, (see photograph 4). The decorative piece screws onto a washer that is placed under the screw used to attach the handleset.

One of the neatest features of the lock is the captive thumb-turn. When the thumb-turn is in place, it

Continued on page 18



 The inside and outside portion of the Medeco residential handleset.

### **GATE SECURITY SELLS**

Hardware for gates, doors & storage



Reviewing gates around a residence should be part of every security audit.

- High quality & value = customer satisfaction
- Increased opportunities for business = additional income
- D&D products are quick, easy and profitable to install
- Consumers can re-adjust products in minutes



from either side of the gate!

convenient, key-lockable access.

replaced with a higher security cylinder.

When it comes to increasing your business, a gate latch is as profitable as a door lock!

Lokk

Latch PRO is uniquely constructed to work effectively in both residential and commercial gate applications. The "External Access"

component fits to the outside (street side) of the gate post to provide

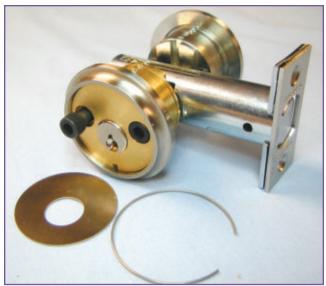
It uses a standard 6-pin key-in-knob style lock cylinder. This cylinder

can be keyed-alike, maison-keyed and master-keyed, or can be

ded technologies
Safety, Privacy & Security

"Selling D&D's products makes good business"

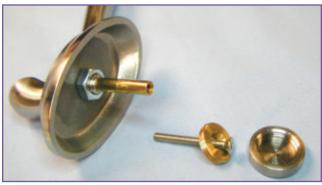
#### Continued from page 16



2. The two pieces of the dead bolt are held together with large hex bolts.







4. Attractive trim that covers the screw for the bottom attachment of the handleset.

looks like a normal, single cylinder deadbolt, (see photograph 5). However, when the thumb-turn is released, you are left with a double cylinder deadbolt, (see photograph 6). This gives you the best of both worlds, convenience and security.

By the way, don't worry about that thumb-turn walking off when you are not looking. It can only be removed by inserting a working key into the outside portion of the deadbolt and turning to the release position. This presses down on a lever that releases



5. The removable thumb turn looks like it belongs there.



6. With the thumb turn removed, you have a double cylinder deadbolt.



7. The thumb turn is released by depressing a retaining lever.

the thumb-turn, *(see photograph 7)*. This is very well thought out.

If you are a little curious about how the thumbturn is made, take a look at this. A thumbturn part is attached to a key part, (see photograph 8). I call it a key part because the bow has been removed. When connected, it provides an attractive thumbturn that can only be removed by someone with a working key to the lock, (see photograph 9).

Other additions to the residential line are Grade 1 residential deadbolts. They are available in both 2-3/8" or 2-3/4" backsets as well as four finishes, just like the handlesets. They have the same heavy construction as the handleset deadbolt and include the thumb-turn retaining feature.

Continued on page 22

## InstaCode 2005

Locksmith Management Software

InstaCode Software has changed to fit new market demands. The software is now offered as a base package, with available add-ons. The base package contains all the codes, card printing, electronic key machines, find partial bittings, cutting trees, graphical layouts, etc.



Base Price \$695

\$200 for 1 Module

\$300 for Both

Add-Ons Include...

Car Opening & Transponder' Information/Programming

MasterKeying

Triax Communication Module \$395 Additional Users Above Three \$185 each DEMO DISC!
Run InstaCode
for 10 days.
Only 10 bucks!

W.H. Software

Includes all modules.

#### **System Requirements:**

InstaCode is supplied on CD ROM and comes complete with an easy to follow step-by-step instruction manual. InstaCode requires 64MB of free RAM and 100MB of available Hard Disk Drive space, mouse or other pointing device and one of Windows NT, 2000, XP or 2003. Floppy disk images are included on the CD ROM so you may make your own set of floppy disks if required.

Pocket InstaCode requires a Pocket PC (not included) with 64mb RAM running Microsoft Pocket PC2000 or later. Contains all the codes but not all the features of InstaCode. Call for details.

Subscribe to InstaCode, as low as \$25.00 a month!

Order or subscribe at www.TheNationalLocksmith.com

Call us at 630-837-2044 to order!

National Auto Lock Service, Inc. 1-800-954-5454







8. It is created from a handle and a key blade.



9. When the setscrew is tightened, you have a custom thumb turn.



10. Here is a card from the card program.
No card, no key duplication!

There is one more security feature that will add to your customer's sense of security. This is the card program. These programs are for consumers who need key duplication protection in addition to protection against physical attack. Authorized individuals are issued a card with embossed control data and a space for their signature, (see photograph 10).

To obtain key duplicates, card holders present the card to any participating Medeco locksmith. The data and signature will be verified and a duplicated key can then be issued.

If you have a customer who is interested in stepping up their hardware security and key control, the Medeco Residential hardware is a great place to start.

For more information, call Medeco Customer Service at 1-800-839-3157 Monday through Friday from 8:00 a.m. to 6:00 p.m. EST. In Canada, call 1-888-633-3264 Monday through Friday from 8:00 a.m. to 5:00 p.m. EST. Circle 362 on Rapid Reply.

 $\mathsf{T}$ 

The same people who brought you the **Curtis** Code Cutter... now bring you the most advanced high security key machine in the world.

BD 1955

Computerized High Security Code Cutter

Only \$10,980 Complete!

1932

The BD Laser is fast, easy and secure

- Cuts to code and decodes high security keys for exact OE duplication
- Fixed height cutter means you'll never cut into your jaws again!
- · Portable . . . can be used in service vehicles
- Touch screen guides user with step-by-step instructions
- Cutter wear indicator tells you when to change the cutter
- Tracks keys cut and allows you to store codes by VIN
- Three year warranty including code updates

See us at A.L.O.A. in Booth #633!

Ask about the PC+ Flash . . . the most advanced edge-cut key machine on the market today with nearly 10,000 units in use.

Portable!

Lease options also available. Call 800-555-KEYS for details! For more information or to view a video on BD Laser, see us on the web at www.BarnesDistribution.com Barnes BARNES BARNES BOWMAN Curtis KAR MECHANICS CHOICE

2005





1 The 2004 Lexus RX 330 is the second generation of Lexus' best selling compact sport utility RX 300. The new RX 330, Sienna minivan and Highlander crossover SUV are all using a modified version of the Camry sedan platform. A hybrid V6 version is due out later this year as the Lexus 400h.

All on-board key programming has been eliminated from this and many other new Toyota and Lexus models, but keys and remotes can be originated or duplicated for this vehicle using the T-Code and the optional Toyota/Lexus software. The 2004 RX 330 uses an internal 4-track transponder key and the mostly unpublished code series of 40,000-50,000. The keyway is the same as the TOY-48BT4, but the TOY-48BT4

will not work for this vehicle, Lexus has used a new chip for this year's model. The only keys that will work for the 2004 RX 330 are dealer part #89070-48820 (Remote Key with power rear hatch option), part# 89070-48810 (Remote Key without power rear hatch option) and part # 89786-60150 (Valet Key).

As of this printing, all keys are only available cut to code from the dealer, or uncut from Transponder Innovations (www.transponderinnovations.com) or from National Auto Lock (www.laserkey.com).

#### Opening the 2004 Lexus RX330



The easiest and quickest method I've found for opening many newer vehicles is with an airwedge and long reach tool. This worked well on this 2004 RX330. For some reason this car did not relock automatically like many other Lexus vehicles.

I like to insert a piece of thin cardboard between the vehicles frame and door weather stripping on the passenger side door. This will help prevent possible scratching to the vehicle frame.



Next insert a plastic wedge.



Now insert and inflate the air wedge.



5 You can now insert the longreach rod.



Maneuver the tip of the longreach rod towards the manual lock/unlock button and pull toward the rear of the car. The door will now be unlocked.



SIMPLE\* has set the standards for pushbutton locks for over 40 years, with designs that are simple and reliable. Now, E-Plex incorporates these same Simplex standards into a lock that also gives you the added security of electronic access control, multiple access codes, and audit capability without the wires.

The E-Plex is non-handed and easily installs on wood or metal doors. Locks are quickly programmed with the lock's pusbuttons or managed with optional Microsoft® Excel based software.

Contact Kaba today to learn how you can get all the benefits of electronic access control with the installation simplicity of Simplex.







#### Continued from page 24

#### Door Lock



The drivers' side door lock is the only external lock on the RX330. It is easy to remove and has all the cuts necessary to make a working key for the vehicle. The Lexus 40,000-50,000 high-security code is stamped on the lock, but the code series is unpublished as of this time. The 2004 version of InstaCode has many of these 40,000-50,000 codes that Lexus has used since 1998. The pinning kit is available from A.S.P., the part number is A-30-111.



There is a plastic grommet on the driver's side door edge.



Remove this grommet to reveal a Torx-27 screw.



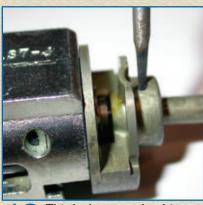
10 Loosen the Torx-27 screw and the lock cylinder will slide out.



11 The lock cylinder removed.



12 The key code 42341 is stamped on the lock, but the code series is unpublished. You may need to disassemble the lock to generate a key.



13 This lock uses a clutching type design, but disassembly is fairly simple. Begin by removing the roll-pin that hold on the tail-piece lever.



14 Next, remove the "C" clip and large spring from the rear of the lock.



15 You can now remove the tail-piece driver.



Now gently pry off the face cap. It will be re-used.



17 You should now be able to remove the cylinder from the front of the housing. Be careful not to drop any of the wafers as the cylinder is removed. Also, notice the clutch assembly that can be removed. The cylinder can be remover easier without removing the clutch-assembly first.

## Going Global!

#### Dealer Exclusive Keyways

Kaba's Peaks Global is a dealer exclusive patented key control system that allows each dealer to have a keyway so unique that there isn't another one like it, anywhere on the globe.

- Complete control over sales and service of your keyway
- Requires your authorization to order cut keys, key blanks and key cylinders
- Does not require any special training to cut the keys – utilizes standard Peaks key cutting equipment
- Industry leader in compatibility with all major cylinder brands







Keyways are limited, call today!

#### Continued from page 26



The lock and all components.



There are only 3 depths in this code series, 1, 3, 5. The wafers are not stamped, but you can tell the difference by the notch in the lower right corner. These tumblers are in order 1-3-5.



20 The key 42341 was decoded to: Left track: 13511 Right Track: 53313 Remember, 5's are the highest and 1's are the lowest cuts.



21 Notice the "L" and the dot stamped on the key blade. This dot is an indication of the new Lexus chip found in these keys. The TOY48-BT4 will NOT work for the vehicles that require this key.

#### Programming New Keys with the T-Code

The following dealer is required, part # 89070-48810. This is a Type 2 Immobiliser system for the T-Code. NO after-market keys like JET will work for this model type. Only factory originals will work from the Lexus dealer.

VEHICLE SELECTION		
MITSUBISHI		
NISSAN		
SUZUKI		
LEXUS/TOYOTA		
V.W./AUDI GROUP		

22 Select Lexus/Toyota from the T-Code menu.

DIAGNOSTIC MENU
RESET IMMOBILIZER
PROGRAM KEY
ERASE KEYS

Using the T-Code you can reset the Immobiliser system if all keys are lost or if you only have a valet key.



## SIMPLEX SOLUTIONS

#### 7100 Series

Kaba Access Control continues to offer you a simple, strong and secure pushbutton lock alternative, even in today's high tech world. With over 40 years of proven performance, you can count on Simplex to handle all of your access control needs.

- · Keyless convenience no keys or cards
- . Easy to install no wiring or computers
- · Easy to maintain no batteries to replace
- Easy to manage one code, can be changed in seconds

The Simplex 7100 Series light commercial and residential locks provide an economical solution for restricting access to private or security

sensitive areas. A streamlined housing with integrated pull makes the lock ideal for front and rear doors, garages, conference rooms, offices, utility rooms and workshops.

Installation is quick and simple thanks to the 7100 Series' field reversible design, and new wider body that retrofits ASA 161 door preparations without additional trim.





Manually relocks Backset: 2%" or 2%"

%" Rim Mounted Deadlocking Latch



Backset: 2 % "
Automatically relocks
Latch holdback

1/2" Deadlocking Latch

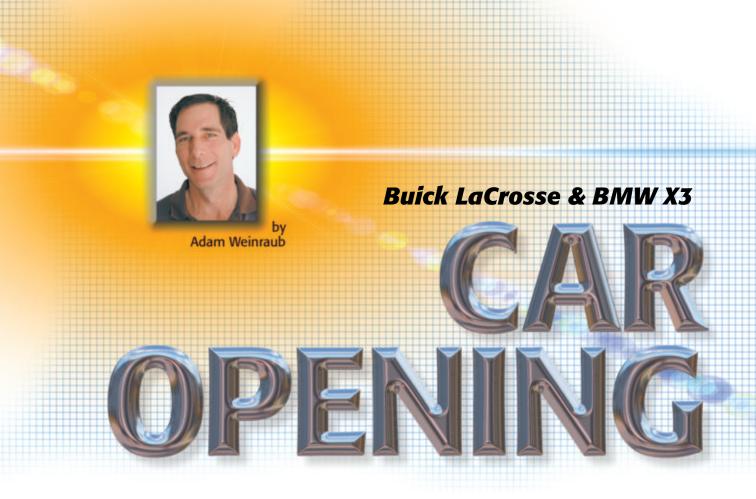


Automatically relocks Adjustable Backset: 2 %" to 2 %4"

Simplex 7100 Series is available in a variety of durable finishes to match any décor, including a lifetime Bright Brass PVD Finish, Antique Brass and Satin Chrome. Additional powder paint finishes include Antique White, Antique Copper, Gold Vein, Silver Vein and Black.

1-800-849-8324 www.kaba-ilco.com





#### **Buick • LaCrosse**

**Year:** 2005 –

**Linkage:** Vertical

Pick: CW DSO

Tool: AO-39 "Double Slide

Tool"

#### PREFERRED OPENING METHOD

This is a new Sedan model for

2005 and replaces the Century & the Regal. This model has horizontal cable linkage on all

doors.

- **1.** Insert a Pump Wedge at 9" from the rear edge of the window glass of the front passenger door. Inflate wedge.
- **2.** Insert the long end of an AO39 "Double Slide Tool" at 2" from the rear edge of the window glass, tip facing forward. (*Photo 2*)
- **3.** Lower the AO39 15" into the door cavity. Rotate the tool 90° counter-clockwise.
- **4.** Lift the AO39 1" to position the tip of the tool under the bell crank, located at the bottom of the vertical rod about 5" to 6" below the outside door handle. (*Photo 3*)



**Buick • LaCrosse** 

**5.** Lift the bell crank to unlock the door.

#### ALTERNATE OPENING METHOD

- **1.** Insert a Pump Wedge at 8" from the rear edge of the window glass of the front passenger door. Inflate wedge.
- **2.** Insert the short end of an AO45 "Loop D Loop Tool" at 8"

from the rear edge of the window glass, tip facing rearward.

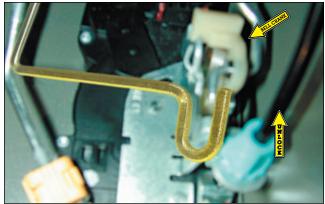
**3.** Lower the AO45 into the door cavity. Rotate the



Buick • LaCrosse Photo 2.

Tool: AO-39 "Double Slide Tool"

30 • Visit www.TheNationalLocksmith.com



Buick • LaCrosse Photo 3.



Buick • LaCrosse Photo 4.

tool beneath the bottom edge of the window glass. Deflate wedge.

**4.** Lift the tool, gradually working the tip of the tool into the

vehicle interior. Rotate the tool 25° clockwise and position the loop of the tool over the lock-unlock button head. Rotate the tool to bind the loop onto the button head. (*Photo 4*)

**5.** Lift the button head slowly to unlock the door.

#### **BMW • X3**



**BMW • X3** 

**Year:** 2004 -

**Linkage:** Horizontal **Pick:** High Security

Tool: AO-27 "MCOT-Handle Pull"

#### PREFERRED OPENING METHOD

This is a new model for 2004. This method applies to vehicles in non-deadlock position only. This vehicle

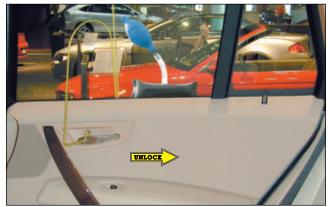


BMW • X3 Photo 2.

Tool: AO-27 "MCOT-Handle Pull"

has cable linkage.

- **1.** Insert a pump wedge at 11" from the front edge of the window glass of the rear passenger door. Inflate wedge.
- **2.** Insert an AO27 "MCOTHandle Pull Tool" at 8" from the front edge of the window glass, tip facing forward. (*Photo 2*)
- **3.** Lower the AO27 14" into the door cavity and rotate it beneath the bottom edge of the window. Deflate wedge.



BMW • X3 Photo 3.

- **4.** Lift the tool, gradually working the tip of the tool into the vehicle interior. Rotate the tool 90° counterclockwise. Position the tip of the tool over the inside pull handle.
- **5.** Continue rotating the tool counter-clockwise to move the pull handle rearward to unlock the car. Pull the handle 2 times to open the door. (*Photo 3*)

This material was excerpted from "The Best Damn Car Opening Manual Period!" by PRO-LOK. For more information and availability check with your distributor or Phone: 714-633-0681;

Web: www.PRO-LOK.com

Addsesss 🔘 http://www.boyleandchase.com/check\_stock\_results.asp?page=2&14anufacturer=VON%20DUPR#&ProductNumber=99&Description=

Dive Home Page Apple Di Apple Support Di Apple Store Di Mac OS X Mac OS X Microsoft MacTopia Di Office for Macintosh Di MSN

Boyle & Chase, Incorporated
Architectural Hardware Wholesale Distributor

.... СНЕСК STOCK ....

>> Perform another Search

Home: About Boyle & Chase: Product Lines: Shipping: Manufacturer Links: Web Retailers: Contact Us

#### **Recent Developments**

- New Line Visonic
- New Line Secura Key
- Omnia's New Stainless Steel Latchsets

#### Request a Catalog

Please complete the following form if you would like to receive a copy of our new product catalog or need more copies 

More



Scrapbook

Page Holder



#### **Check Stock Search Results**

1 of 2 Pages: Total Matching Records: 62

Product No.	Description	On land	List Price
5455003FD	BALDWIN 5455.003.FD FULL DUMMY LIFETIME FINISH	52	83.60
5455003PASS	BALDWIN 5455.003.PASS PASSAGE SET LIFETIME FINISH	108	96.80
5455003PRIV	BALDWIN 5455.003.PRIV PRIVACY SET LIFETIME FINISH	78	110.00
WS407CCV26D	IVES WS407-CCV 26D WROUGHT WALL DOOR STOP	79	4.63
WS407CCV3	IVES WS407-CCV 3 WROUGHT WALL DOOR STOP	102	4.63
WS407CCV5	IVES WS407-CCV 5 WROUGHT WALL DOOR STOP	140	4.63
WS407CVX10B	IVES WS407-CVX 10B WROUGHT WALL DOOR STOP	69	4.63
WS407CVX26	IVES WS407-CVX 26 WROUGHT WALL DOOR STOP	76	4.63
WS407CVX26D	IVES WS407-CVX 26D WROUGHT WALL DOOR STOP	65	4.63
WS407CVX28	IVES WS407-CVX 28 WROUGHT WALL DOOR STOP	22	4.36
WS407CVX3	IVES WS407-CVX 3 WROUGHT WALL DOOR STOP	39	4.63
WS407CVX32D	IVES WS407-CVX 32D WROUGHT WALL DOOR STOP	25	3.99
WS407CVX4	IVES WS407-CVX 4 WROUGHT WALL DOOR STOP	27	4.63
4111ALLH	LCN 4111 ALUMINUM LH TB	50	261.00
4111ALRH	LCN 4111 ALUMINUM RH TB	65	261.00
F10AVA619	SCHLAGE F10 AVANTI 619	91	46.00
F10AVA620	SCHLAGE F10 AVANTI 620	74	46.00
F10FLA605	SCHLAGE F10 FLAIR 605 NON-HANDED	600	37.50
F10FLA609	SCHLAGE F10 FLAIR 609 NON-HANDED	100	38.90
FA10STA505	SCHLAGE FA10 ST. ANNE'S 505 PASSAGE	88	51.20
FA10STA605	SCHLAGE FA10 ST. ANNE'S 605 PASSAGE	73	46.00
FA40DNB613	SCHLAGE FA40 DANBURY 613 PRIVACY	43	48.80
FA40DNB619	SCHLAGE FA40 DANBURY 619 PRIVACY	52	48.80
FA51CHP620	SCHLAGE FA51 CHAMPAGNE 620 ENTRANCE	38	107.10
FA51CHP626	SCHLAGE FA51 CHAMPAGNE 626 ENTRANCE	48	107.10
S10DFLA605LH	SCHLAGE S10D FLAIR 605 LH 10-001	30	126.00
S10DFLA605RH	SCHLAGE S10D FLAIR 605 RH X 10-001	32	126.00
S10DFLA609LH	SCHLAGE S10D FLAIR 609 LH 10-001	11	126.00
S10DFLA609RH	SCHLAGE S10D FLAIR 609 RH 10-001	12	126.00
22EO283	VON DUPRIN 22EO-SP28-3' RIM DEVICE X 299 STRIKE	31	314.00
22EO284	VON DUPRIN 22EO-SP28-4' RIM DEVICE X 299 STRIKE	10	326.00
22EO3133	VON DUPRIN 22EO-SP313-3' RIM DEVICE X 299 STRIKE	20	314.00
22EO3134	VON DUPRIN 22EO-SP313-4' RIM DEVICE X 299 STRIKE	6	326.00
22EOF283	VON DUPRIN 22EO-F-SP28-3' RIM FIRE DEVICE X 299F STRIKE	16	401.00
22EOF284	VON DUPRIN 22EO-F-SP28-4' RIM FIRE DEVICE X 299F STRIKE	8	413.00
22E0F3133	VON DUPRIN 22EO-F-SP313-3' RIM FIRE DEVICE X 299F STRIKE	3	401.00
99E0F26D3	VON DUPRIN 99EO-F-26D-3 RIM FIRE DEVICE X 299F STRIKE	27	896.00
99EO26D3	VON DUPRIN 99EO-26D-3' RIM DEVICE X 299 STRIKE	27	790.00
99L26D3LHR	VON DUPRIN 99L-26D-3'-LHR RIM DEVICE X 06 LEVER X 299	35	1126.00
99L26D3RHR	VON DUPRIN 99L-26D-3'-RHR RIM DEVICE X 06 LEVER X 299	32	1126.00

## BOYLE & CHASE OFFERS YOU SELECTION, AVAILABILITY & SUPPORT

THEN THERE'S ALWAYS...

#### SIMPLICITY

Find items from our huge manufacturer's product inventory using our "Check Stock" feature.

#### ANSWERS

Call our knowledgeable technical sales staff with product questions.



#### ACCURACY

Rigid systems of checks for accurate processing of your order.

#### PRIVACY

Drop ship product with customized packing lists and shipping labels.

#### TAILORING

We can tailor the product specifications to your specific application.

#### **ESTIMATING**

Use our online pricing calculator to prepare quotes, estimates and enter predetermined customer discounts.

#### NOTIFICATION

Track shipments via e-mail or faxed confirmation of the invoice as soon as an item is shipped.

Call, fax or e-mail us to receive our complete Boyle & Chase Product Catalog or our Electrified Openings Guide that includes checklists and schematics utilizing the electric and electronic hardware we stock for access control.



**BOYLE & CHASE, INCORPORATED** 

72 Sharp Street, Hingham, MA 02043 Phone: 800-325-2530 Fax: 800-205-3500 Web Site: www.boyleandchase.com Fe-mail: sales@boyleandchase.com



nnually, The National Locksmith takes a look back to see which were the most popular items in the previous year. We select these items based on the amount of interest generated via reply card responses, e-mails, phone calls, and the staff's sense of which items caused the most locksmiths to sit up and take notice.

We call these items TNL's Choice, because they have been chosen by you, our readers, and our staff as among the most interesting products published last year. Congratulations to the TNL Choice winners. Enjoy taking a look back at the best of last year.

#### A-1's Magnum Pick Gun

A-1's powerful Pick Gun (#44) features easy tension adjustment and a 5-year unconditional warranty. Attractively priced, this pick gun includes four tips and a tension wrench.



The pick gun can be easily disassembled for maintenance.

#### Adams Rite 4593 Latch Pull

The Adams Rite 4593 Latch Pull<sup>a</sup> is a lockable pull handle that offers flexibility of traffic control during and after business hours. It is suitable for all applications, which require free entrance at certain times and controlled, or exit only access at other times. It offers one-handed operation and two modes, which can result in the locking of the door upon closure, or just latching the door to allow easy access.

Its classic looks, heavy-duty construction, and flexibility has allowed the Latch Pull, along with a deadlatch for metal stile glass doors, to blend in with any architecture and become a popular replacement for a traditional deadbolt in narrow, medium and wide stile aluminum doors. Retrofitting with the Latch Pull is a fast and



simple operation that requires a minimum of tools. All necessary mounting hardware is included with the device as well as preparation templates for both right handed and left handed operation.

The Latch Pull is available in 3 painted finishes, has an electrification option either pre-installed or in kit form and is ADA compliant. The device is adaptable to use with either 5-pin, 6-pin or 7-pin lock cylinders, and works with Adams Rite 4500, 4700 latches and 8300 & 8400 series exit devices.

#### Arrow Pointe Interchangeable Core

Arrow's Pointe Interchangeable Core offers dealers' unmatched flexibility and keying options. The unique manufacturing process in the Arrow Pointe IC Core features four main components: the plug, shell, locking sleeve, and faceplate. This precision process allows for a stronger core. The



Pointe is a standard format IC core and is available in 6 or 7-pin, Arrow and competitive keyways.

Arrow Keyways: 1C, 1D (standard) and Restricted Keyways (consult factory for availability) Best Keyways: AB, BB, CB, DB, EB, FB, GB, HB, JB, KB, LB, MB, and QB. 6-Pin: 100CR x keyway; 7-Pin: 7100CR x keyway; 26D & US4 Finishes; Combinated and Uncombinated; Sleeve Design and Solid Brass Construction.

#### D&D Lokk-Latch Round-Post for Chain Link

D&D Technologies has a new model of the company's popular Lokk-Latch®. The Lokk-Latch Round Post, model LL5ARND, fits chain link and other round posts with diameters ranging from 1-7/8" to 2-7/8", and gate frames ranging from 1-3/8" to 2". The latch is key-lockable, fits up to 2" gate gaps, and has an optional push-button External Access Kit. D&D also introduces the Tru-



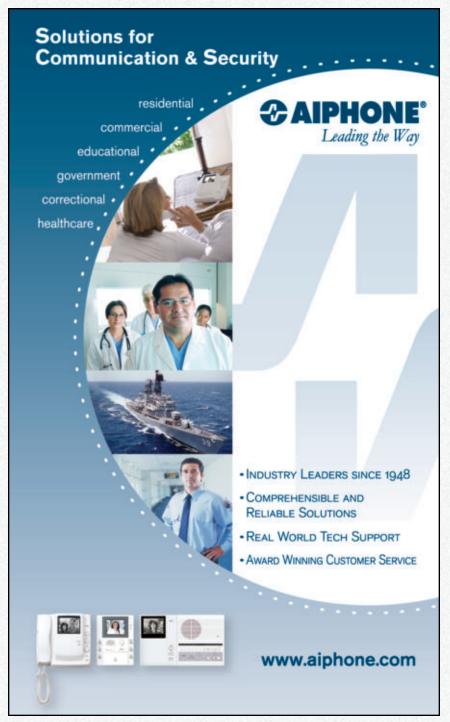
Close® self-closing Round Post Hinge for heavy-duty gates.

Ideal for larger gates up to 132 lb., the TCHDRND1 model fits post diameters of 1-7/8", 2", 2-3/8" and 2-7/8", and gate frames of 1-3/8" and 1-5/8". The TCHDRND2 fits fence post and gate frames 1-7/8" to 2". Like other D&D gate hardware products, these new products are made of molded, glass-reinforced polymers, so will not rust, and come with a Limited Lifetime Warranty.

#### **High Tech Lighted Long Tool**

New from High Tech Tools is the new Lightning Rod® Long Reach Tool. When using a long reach tool to unlock an automo-





bile, one major problem is the inability to see the door lock button at night, or through dark tinted glass in broad daylight. The lightning Rod® incorporates a self-contained lighted tip, which allows you to see the door lock button easily.

#### **HPC Lever Handle Remover**

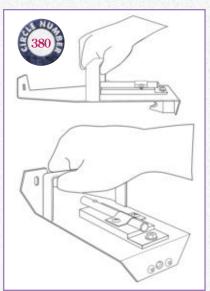
HPC's Lever Lock Handle Remover is designed to quickly remove locked lever handles for servicing without damaging the lever or cylinder. It is ideal when picking the lock is not an option. You simply place the tool's specially designed hub over the



lever, and using a simple procedure of manipulating a few bolts and screws you are able to remove the handle, open the door, and service the lock. Simple to use with amazing results! For more information on HPC tools go to www.hpcworld.com

#### **KEEDEX**

The Door Laser from Keedex is used for core-drilling doors.



The use of a Laser Sight assures accurate drilling. The Door Laser is also affordably priced.

#### **Lockmantools Multi-Tool**

The locksmith Multi-Tool by Lockmantools has over 25 specific locksmith functions. Designed by a locksmith for locksmiths, the tool can service a variety of different hardware for Schlage, Baldwin, Corbin/Russwin, Lori, Adams Rite, Master padlocks, Medeco, Arrow, Jackson cross-



bars and many others, the company says. The tool is made of bead blasted stainless steel for extra durability and folds up to 4 inches closed. A ballistic cloth carrying case clips onto the user's belt for fast access and convenience.

#### Lockmasters Keyless Remotes Packages

Lockmasters' new Keyless Remote Packages are make, model, and year specific and are specifically designed to cover a



wide array of applications for a very minimal investment. Packages feature new, replacement remotes, application guides and complete programming instructions for all applications in the package.

For as little as \$100, the locksmith can now purchase a remote package that covers dozens of the most popular vehicles on the road today. A variety of packages are available covering Ford, GM, Honda and Mitsubishi and programming instructions are thorough and easy to understand.

#### **Major Manufacturing Pit Bull**

The Pit Bull tool is used to form a rectangular pocket in the edge of a hollow metal door. Application of the tool is almost effortless; simply drill the latch and cross bore holes and install the Pit Bull. Using a few turns with a wrench will squeeze an indentation into the door's edge. The result is a pocket that will accept both 1" and 1-1/8" wide by 2-1/4" tall latches.



#### **Monarch Coin & Security**

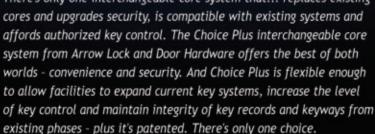
Monarch Coin & Security has added to its stock a two-piece extended key blank. This eliminates the hassles of having a tubular key cutting machine to accommodate the extra length of the key bow. The brass tubular stem is first chucked up in any tubular key cutter. Once satisfied with the cuts,

Continued on page 38

## WHEN IT COMES TO INTERCHANGEABLE CORE SYSTEMS THERE'S ONLY ONE CHOICE.









To learn more about Choice Plus and the entire line of interchangeable core products including mortise locks, Grade 1 and Grade 2 locksets, deadbolts and panic hardware, visit www.arrowlock.com.

LUCK & DUOR HARDWARE

Aim higher

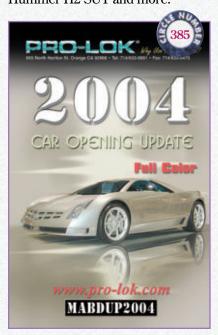
325 Duffy Avenue, Hicksville, New York 11801 Phone 516.704.2700 • Fax 877.228.6480 www.arrowlock.com



screwed into the knob and the brass pin in the knob is driven in to lock it into place. Ideal replacement for the hard to get at Greenwald Hide-A-Key coin boxes.

#### PRO-LOK 2004 Car Opening Update

The 2004 update covers the latest foreign and domestic vehicles on the road. Written instructions on every vehicle along with full color photos of every opening method. Alternate methods included on the same page as the preferred method. Compact size 5-1/2" x 8-1/2". The 2004 update contains new models such as: the Acura TSX, Audi RS6, Buick Rainier, Cadillac SRX, Chevrolet Aveo, Colorado and SSR, Chrysler Crossfire and Pacifica, Dodge Sprinter and SRT-4, Ford Freestar, GMC Canyon, Kia Amanti, Lexus ES330 and RX330, Mazda Mazda3 and RX-8, Mercury Monterey, Mitsubishi Endeavor, Nissan Pathfinder Armada and Titan, Porsche Cayenne, Saturn Ion Quad Coupe, Scion xA and xB, Suzuki Forenza and Verona, Volkswagen Phaeton, R32 and Touareg, Hummer H2 SUT and more.



#### STRATTEC Launches STRATTEC XL Line

STRATTEC XL (Xtended Line) is a new product line that includes transponder and traditional keys, and other products. The STRATTEC XL brand delivers automotive OEM quality, expands STRATTEC's aftermarket product line and offers a stronger and more profitable program for distributors and locksmiths.



STRATTEC XL keys are designed and manufactured using the same quality components and exact specifications of its OEM line of products, resulting in an aftermarket automotive key product that has the look and feel of the original equipment manufacturer. It is backed by STRATTEC's industry-leading sales support, customer service and product training.

The initial roll out of STRAT-TEC XL Automotive Keys will include more than 30 sku's, offering car models from the major import lines: Honda, Mazda, Nissan, Toyota, Mitsubishi and Hyundai, plus many other domestic-built models. With this addition to STRATTEC's product line, they are able to cover 90-percent of the replacement key market for distributors and locksmith customers.

#### Yale eBOSS

Yale Commercial Locks & Hardware has introduced Yale eBOSS, a cylindrical electrified digital keypad lockset designed to provide the industrial, commercial, residential and hospitality marketplace with a secure, reliable and moderately priced keyless entry.

The new e5496LN Series eBOSS (Electronic Battery Operated Security Solution) features patent-pending keypad blinders to keep unwanted eyes from viewing codes. In addition, eBOSS' patented Free Wheeling Lever provides both impact and vandal resistance, as well as a mechanical key override.



All programming is easily accomplished from the keypad utilizing LED guidance, and changing codes takes only seconds for an authorized user. The battery-operated, standalone product is motor-driven and is reliable for more than 100,000 cycles. In addition, a hard-wire option also is available.

The product's motorized Grade 1 cylindrical lock can be programmed for up to 94 users, and is available in secure, lockout and passage functions. The weather-resistant, ADA-compliant keypad also can be used in both interior and exterior environments.

TIL

### SAVE TIME WITH HPC.



The faster you finish one job, the sooner you can start the next. No one understands that more than HPC. That is why HPC provides you with so many innovative ways to help you save time. From software that does your tedious work in seconds instead of hours to tools that assist you in completing your work promptly and professionally. Earn more in less time with HPC!

Clockwise: CodeSource\* Plus (No. CS-CD), Clean Grip Impressioning Tool (No. CGIT-10), Mortise Cylinder Lock Tool & Die Set (No. CLTD-5), KeyTrail\* (No. KT-CD), Vise Held Plug Holder (No. CPH-5), Top Pin Loader (No. TPIN-2), Interactive Car Opening Authority (No. COA-CD), Flip-It™ (No. FIT-2), Stamp Aligner™ XL (No. SA-7XL), MasterKing\* (No. MK-CD), Lever Handle Remover (No. LHR-100), Pin Tumbler Tweezers with Pin Pushing Attachment (No. TPT-5).



HPC, Inc. 3999 N. 25th Avenue Schiller Park, IL 60176 USA Tel: 847.671.6280 Fax: 847.671.6343 www.hpcworld.com

## iterature Drochures

e all know that there is very little that is free in life anymore. When there is, it's best to take advantage of it. Such is the case of manufacturers literature and brochures. Most have available for the asking product brochures or product catalogs designed to show their latest product offerings and specification information. And we all know that there is no substitute for information, so get all you can, especially if it's free!

By circling the Reader Response (RR) number associated with each manufacturers press release on the Reader Response card provided in this magazine and dropping it in the mail, valuable information will be sent to your door step. It doesn't get much easier to build your personal library of valuable information.

#### Lockmasters

Lockmasters' latest catalog contains over 3000 items for the

LOCKMASTERS
It's All Here.

363 m

LOCKMASTERS

LOCKMASTE

safe technician, locksmith and automotive locksmith. The catalog features tried and true products as well as the industry's newest and most innovative products. Products included are a full range of safe locks and parts, safe tools, automotive diagnostic tools, keys, decoding and duplicating equipment.

#### **Lund Key Control Systems**

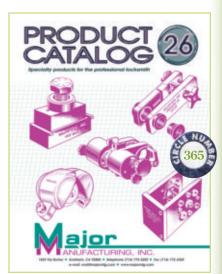
Lund Key Control Systems and cabinets are described in a new sixteen-page catalog. Lund manufactures over 70 different styles of key cabinets and wall panels with capacities from 10 to 3312 hooks.

Since 1940 hotels, motels, hospitals, nursing homes, post offices, universities, government facilities, airports, malls, offices, prisons and construction sites have used Lund Key Control Systems.



#### Major Manufacturing

Major Manufacturing's 76-page product catalog is packed with more than 250 specialty locksmith installation tools and supplies,



ranging from the signature Kee-Blok to the multi-faceted Hardware Installation Tools (HIT Series). Products are cross-referenced by description and number. Each item in the collection features an in-depth description as well as an illustration of the tool or product in use.

#### MBA USA

Börkey key machines; LaGard safe locks; furniture locks; cash boxes; and much more are available through the new 2005 MBA USA catalog! We have added hundreds of new products—many available



exclusively through MBA. If you haven't taken a good look at us lately, now is the time.

#### Numberall Stamp & Tool Co., Inc.

Numberall Stamp & Tool Co. Inc. has a free 34-page catalog outlining all types of metal marking equipment. Included with every catalog is a Free



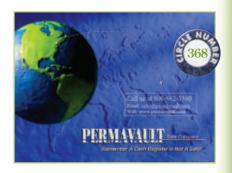
Length of Impression Ruler, and complete price lists.

The catalog has several pages dedicated to character styles and character data. The next 31 pages show and describe various types of marking equipment. Numbering heads, hand held and press mount, hand stamps, type and typeholders, numbering & lettering presses and small bench presses. There are

also numerous types of other types of marking equipment.

#### Perma-Vault

Perma-Vault Safe Company's product catalog contains photos and specifications of its broad assortment of cash protection system units, hopper safes, wall safes, in-room safe deposit boxes, cash boxes, pistol boxes, through the wall or door depository safes, depository safes, hotel safes, safe deposit boxes and in floor safes. The company will also custom build safes to assist in satisfying a particular customer's needs.



## FASTRACK











Alarm Lock Systems Inc





Hardware Inc.

KROY®
ADA Regulatory Signs

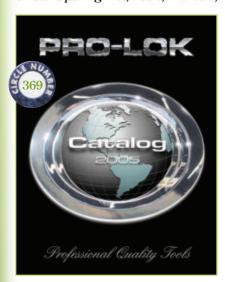
1-800-458-8707 Fax 800-667-8701

We accept Visa, Mastercard and American Express Email: sales@fastrackhardware.com www.fastrackhardware.com



#### PRO-LOK 2005 Catalog

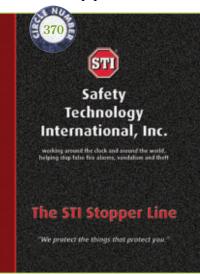
The 2005 PRO-LOK Catalog. As our company has grown over the last 20+ years, our goal has been not just to maintain, but to actually improve the quality of each and every one of the products we make. Our company slogan, "Why Use Anything Else? Is not just something we say, it's something we believe in very strongly. Get all the latest information on Car Opening Kits, Tools, Manuals,



Lights, Blue Punch Key Machines, Key Decoders, Key Hooks and Tags, Installation Template and Jigs, Assorted Handy Locksmith Tools, Picks and Picking Tools, Safe Bits, Electronic Safes, Gun Locks, Cash Boxes and much, much more.

#### Safety Technology Inc.

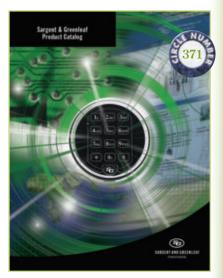
STI manufactures multipurpose push buttons, protective covers and alarms to help prevent theft and

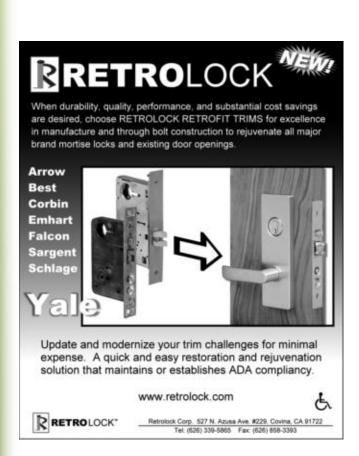


vandalism to: fire pull stations, smoke detectors, strobe/horns, biometrics, keypads, exit signs, emergency lights, thermostat controls, motion detectors, clocks, AEDs and heated covers for fire pull stations or strobe units. Many products UL Listed and ADA Compliant.

#### Sargent & Greenleaf

Sargent & Greenleaf's 40-page product catalog displays and







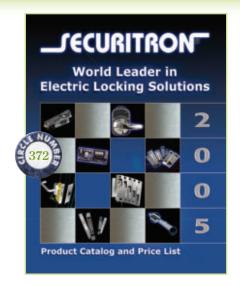
describes most of the company's products, which are used by locksmiths and safe technicians. Useful feature and application information is offered. Products included are mechanical and electronic safe locks, safe deposit locks, vault locks, repair and service parts, time locks, key blanks, padlocks, and panic exit devices.

#### Securitron Announces 2005 Product Catalog

Securitron has released its 2005 product catalog and retail price list.

The resulting design is like nothing Securitron has ever released before. The new catalog packs all the product information needed in a sleek, modular design that is not only fax friendly, but perfect for photocopying and inserting in to specs and job files.

In addition to the new design, Securitron has added new features to the catalog, including

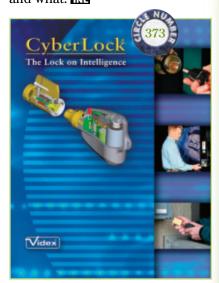


an "Essentials" section which offers detailed product selection charts, a glossary and other helpful information.

#### Videx

Videx manufactures CyberLock® electronic lock cylinders designed to install inside mechanical lock hardware and give users access control capabilities. CyberLocks

eliminate key control problems; cylinders cannot be picked, and the keys cannot be duplicated. Schedules can be set to restrict access to pre-determined days and times. A record of every entry and attempted entry is stored in both the cylinder and the key, providing a comprehensive audit report that details who, where, when, and what.







# OSI OMNILOCK (B) (B) (C) — and— (D) (A) (D) (C) Reader Locks

hortly after its founding in 1986 in Sunnyvale, California. OSI Security Devices introduced one of the World's First battery-operated standalone electromechanical locks: the OMNILOCK® OM250. This system, built to stringent military and industrial specifications, firmly established OSI's reputation of strength and reliability. The early adopters of the OM250 product remain brand loval OMNILOCK® customers today. It is also important to note that, in this era of designed-to-be-obsolete products, the OM250 is still manufactured today, some 19 vears after its conception! OSI's products have evolved over the ensuing years, all the while being placed in more and more Government, Educational. Institutional, and Fortune 1000 corporate facilities. In year 2000, OSI introduced the 2000-Series products, card-reading locks that can read existing Magneticstripe or HID Proximity credentials.

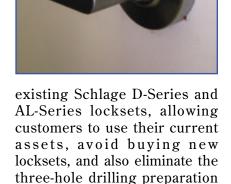
All OSI systems feature audit trails, time schedules and system user capacities range from 100 users per lock to 2000 users per lock. All **OMNILOCK®** products are self-contained, standalone, battery-powered systems that can last for years on a set of four 'AA' Alkaline batteries.

Full diagnostics including motor, keypad, and battery tests may be run on any of the **OMNILOCK®** systems without removing them from the door. On the 2000-Series systems, battery voltage is reported back to the database software so that the system

administrator can actually monitor batteries through their 120,000-cycle lifetime.

OMNILOCK® Standalone Access Control systems install more easily than any other integrated access system in the world. Cylindrical access systems install in a standard cylindrical door preparation, which allows end users to install them without drilling any holes in their doors. This is especially desirable for leased properties and property management corporations. Available cylindrical systems are the Arrow Q-Series, the Schlage-D-Series, the Schlage ND-Series, and the Cylindrical Quick Adapter, (see photograph 1.) Additionally, the OMNILOCK® Quick Adapter systems adapt to

1. Cvlindrical Quick Adapters may be used with pre-2005 Schlage **D-Series or the current** or past Schlage ALSeries locks. Like all **OMNILOCK®** Cylindrical locks, the Quick Adapter Systems install without drilling any holes in the door. These systems work with the 50, 53, 60, 66, 70, 73, 80, 82, and 85-Series Schlage D-Series or ALSeries locks.



OMNILOCK® Mortise Access Control systems are available on the Schlage L-Series chassis and the Falcon LM-Series chassis. These systems install easier

required by other standalone

systems, (see photograph 2.)



#### CODE-SEEKERT

It's everything you need to crack the vast transponder market.

The right tool. The right codes. The right company. The endless opportunity. So get started. Now. Here.



#### Continued from page 44



2. The Schlage ND-Series lock is pictured in the two images above. Note in the right-hand image that, like all Cylindrical OMNILOCK® systems, the ND-lock installs in a Standard ANSI door preparation and requires no additional holes to be drilled in the door.

systems and require only two 3/16-inch security screws to install on the door. Mortise locksets are available in several different configurations. The Mortise systems may be purchased as standard M-Series Mortise locks; or they may be ordered

in the deadbolt MDSeries which features a 1-inch throw deadbolt, (see photograph 3.) Additionally, the MDL-Series deadbolt systems offer a privacy lockout feature. When the deadbolt is thrown on

these locks, a key is required to gain access from the outside but one motion free egress is always granted from the inside.

Finally, for the highest security facilities, the Auto-deadbolt locks offer a system where, whenever the door is closed, not only the

that all other standalone
Mortise access

4. OMNILOCK® Exit Device Trims adapt to existing Precision,
Von Duprin, Corbin-Russwin, Sargent, Yale, Detex Advantex,
and Dorma Exit Devices. All OMNILOCK® Exit Device Trims
install in the respective mechanical door prep without



drilling any additional holes in the door. OMNILOCK® QA2000-X Magnetic-card reader system installed on a Von Duprin 99 (below left), and an OMNILOCK® QP2000-X HID Proximity reader system installed on a Corbin-Russwin ED5200 Exit Device (below right). All OMNILOCK® systems are available in weatherproof versions that require NO DRILLING and NO ELECTRONICS inside the door.

3. The OMNILOCK®
OM2000 MortiseDeadbolt lock (above
left) can control access
for up to 2000 individual
users per door, can
accept existing
Magnetic-stripe cards,
and installs in a fraction
of the time of competing
mortise systems. The
Mortise Auto-Deadbolt

provides the highest level of security. Whenever the door is closed, both the latch and the deadbolt are extended into the door strike (pictured is an OM2000-ADB lock).

latch, but the deadbolt is extended. This system is also available in an Institutional double-sided configuration for detention or high-value sites.

Remaining consistent with OSI Security Devices' corporate dedication to designing the easiest-to-install standalone access systems in the world,



OMNILOCK Exit Device Adapter Kits (Sample)							
VON DUPRIN EXIT DEVICE MODEL №	VON DUPRIN TRIM MODEL №	OMNILOCK® EXIT TRIM COLOR	OSI ADAPTER PLATE KIT №				
98F, 99F, 9827-F,	000 DT 000 NI 440 NI	GRAY	11819-001				
9927-F, 9847-F, 9947-F, 9848-F, 9948-F	990 DT, 990 NL, 110 NL, 990 TP, 991 K, 992 L, 696 NL, 697 NL, 696 TP, 697 TP, 996 DT, 997 DT	BLACK	11819-002				
		SATIN CHROME	11819-003				
CORBIN RUSSWIN/YALE EXIT DEVICE MODEL №	CORBIN RUSSWIN/YALE TRIM MODEL №	OMNILOCK® EXIT TRIM COLOR	OSI ADAPTER PLATE KIT №				
		GRAY	11823-001				
ED5200A ED5470B ED5860B	755, 759 955, 957 1310, 1355, 1357	BLACK	11823-002				
		SATIN CHROME	11823-003				

TARIF 1

OMNILOCK® Exit Device Trims adapt to new or existing Von-Duprin, Corbin-Russwin, Precision, Sargent, Yale, Arrow, Detex Advantex, or Dorma Exit Devices and require no additional holes to be drilled in the door, (see photograph 4.) OMNILOCK® Exit Device Trims adapt to rim, surface-mounted vertical rod, and concealed vertical rod fire exit and panic exit devices. Each of the supported devices are equipped with adapter kits that consist of an adapter plate that coincides with the manufacturer's hole-pattern, screw thread, and screw diameter for each of the

corresponding mechanical exit devices (see Adapter Kit sample in Table 1 above) and a stainless-steel tailpiece that is adjustable to allow removal of any free play in the existing Exit Device control head assembly.

NOTE: Sample only—this table does not include part numbers for Precision, Sargent, Detex Advantex, Dorma, or Arrow Exit Devices.

In addition to the Cylindrical, Mortise, and Exit Device Systems, OSI Security Devices also offers the **OMNILOCK®** standalone Wall Mount System, (see photograph 5.) The versatile

Wall Mount System allows end users to control almost any electrified circuit. This system incorporates a Form-C relay that is capable of controlling 12-24 DC/AC voltage circuits. This Form-C relay has two sets of contacts: one is normally open (Fail Safe), and one is normally closed (Fail Secure). Either or both of these contacts may be used at any time. Additional relays may be added to the systems if desired. The current rating of the Wall Mount System Form-C relay is 6 amperes, so this system can handle any electrified industrial hardware.





5. The OMNILOCK® Wall Mount Systems provide a versatile solution for those applications where it is difficult to install a door-mounted system or where it is necessary to integrate an access system with existing surveillance systems or electrified systems. The

Wall Mount can be integrated with Audio-Visual reception systems (OP2000-WMS HID Proximity reader with Aiphone voice-camera system above left). The Wall Mount can also be used to bring legacy systems into the current days. The OP2000-WMS system (above right) allows a car dealership to take control of and audit movement of its 500 employees and large inventory of vehicles).

The Wall Mount System is available in all of OSI's electronic configurations:

- **1.** As a Keypad-only OM100, OM300, OM500 or OM250, or...
- 2. As Magnetic Stripe card and keypad OM2000 system, or...
- **3.** As an HID Proximity card reader and keypad OP2000 system.

The Wall Mount System is used to control a variety of hardware including electric strikes, magnetic locks, electrified exit devices, drivethrough gates, elevators, or

other special electric circuits. Additionally, like every **OMNILOCK®** system, the Wall Mount System has built-in "cold" contacts to allow remoteswitch opening or wiring into fire alarm or fire-life-safety circuits.

The **OMNILOCK®** Access Control System Series RL100 Rentallock offers the combination of the industry's



most sophisticated codeencryption software technology and OSI Security Devices' proven electronic superiority, (see photograph 6.) Add this to Grade-1 USA locksets and nothing can beat this system. Manufactured in America, the Series RL100 provides all of the superior features and quality that you have come to expect from OSI Security Devices and the OMNILOCK®. Used in conjunction with the required software, the RL100 series systems accept not only userdefined access codes, but have a virtually unlimited number of algorithm-determined timespecific codes that allow property managers, property owners, resort managers, or resort owners to assign codes from their office, home, or laptop without the inconvenience of keys, checkin, or check-out. These systems are available in every mechanical configuration that OSI Security Devices offers-Cylindrical, Mortise, Exit Device Trim, Quick Adapter, and Wall Mount System. The RL100 Rentallock system allows managers to give renters or end users access for as little as hours or as long as months of time at the controlled property. In the case of incident or desired monitoring, all locks record an audit trail of lock activity. Audit reports may be reviewed and/or printed using standard Microsoft Windows Notepad or similar application software.



6. An Alphanumeric
Keypad allows RL100 end
users to tailor and
personalize their 4-to-9
character entry codes.
The RL100 systems are
available in every
mechanical configuration
that OSI Security Devices
offers—Cylindrical,
Mortise, Exit Device Trim,
Quick Adapter, and Wall
Mount System.



## Your Neighborhood Distribution Center





Corp. Hqtrs Grapevine, TX 817-421-5470

Albuquerque, NM 505-816-0100

Atlanta, GA 404.898.8740

Buffalo, NY 315-455-9305

Calgary, Alberta 403-291-4844

Chicago, IL 708-456-9600

Cincinnati, OH 513-271-8530

Cleveland, OH 216-335-9740

Columbus, OH 614-436-6619

Dallas, TX 972 • 664 • 1240

Davenport, IA 563-391-8366

Denver, CO 303-922-3041

Detroit, MI

586 • 755 • 3658 Edmonton, Alberta

780-944-0014

Fort Worth, TX 817-284-5696

Grand Rapids, MI 616 - 534 - 1067

Halifax, Nova Scotia (2 locations) 902 • 468 • 1373

Hartford, CT 860-296-7886

#### WHEN IT COMES TO INTERCHANGEABLE CORE SYSTEMS THERE'S ONLY ONE CHOICE.











There's only one interchangeable core system that... replaces existing cores and upgrades security, is compatible with existing systems and affords authorized key control. The Choice Plus interchangeable core system from Arrow Lock and Door Hardware offers the best of both worlds - convenience and security. And Choice Plus is flexible enough to allow facilities to expand current key systems, increase the level of key control and maintain integrity of key records and keyways from existing phases - plus it's patented. There's only one choice.

To learn more about Choice Plus and the entire line of interchangeable core products including mortise locks, Grade 1 and Grade 2 locksets, deadbolts and panic hardware, visit www.arrowlock.com.



Aim higher

Contact your local IDN Distributor for more information about Arrow Interchangeable Core Products

Houston, TX 713-668-0022

Indianapolis, IN 317-635-8100

Jacksonville, FL 904 • 387 • 0663

Kansas City, KS 913-599-4111

Las Vegas, NV 702 • 736 • 4553

Livonia, MI (3 locations) 734-591-1150 Los Angeles, CA 562 • 463 • 4870

> Memphis, TN 901-795-2250

Miami, FL 305-651-1598 Milwaukee, WI 262 - 790 - 9750

Minneapolis, MN 952 886 3840

Montreal, Quebec 514-956-0248 New Orleans, LA 504 8 8 37 - 73 1 5

> Norfolk, VA 757-853-0611

Oklahoma City, OK 405 • 942 • 8750

> Omaha, NE 402+592+1652

> Orlando, FL 407-297-7722

Ottawa, Ont. 613 - 749 - 2172

Philadelphia, PA 215+288+5588

> Phoenix, AZ 602+272+5300

Pittsburgh, PA 412-771-6122

> Raleigh, NC 919-227-0007

San Antonio, TX 210+545+3396

> St. Louis, MO 314-692-8391

> Syracuse, NY 315+432+8450

Tampa, FL 813-886-8007

Toronto, Ont. 416 • 248 • 5625

Tucson, AZ 520+322+5675

Vancouver, B.C. 604•253•0017



CCTV · SAFES · DOOR HARDWARE · ACCESS CONTROL SECURITY PRODUCTS • LOCKSMITHING TOOLS

#### Continued from page 48

OSI Security Devices offer the World's only standalone Institutional locks that feature an audit trail and time schedules, (see photograph 7.) Furthermore, OMNILOCK® Institutional locks are available not only in cylindrical, but also in mortise lock configuration. These locks may be keypad only, magnetic-striped card with (or without) keypad, and HID Proximity Card Reader with keypad (or without keypad). The cylindrical Institutional lock installs in the standard door preparation for a cylindrical lockset. These systems are available in standard or interchangeable key cylinder configuration. The Mortise Institutional locks utilize and autodeadbolt mortise chassis. feature clutching levers and may be furnished with or

7. The Cylindrical Institutional lock (at left) offers double-sided access control. The Mortise Auto-deadbolt system provides the highest level of access control for Institutions. At left is a Magnetic card QA2000 system and at right is a proximity card reader OP2000-DAD double-autodeadbolt system with no keypad and no key override. without key bypass. Together, these systems satisfy the requirements of high-security or Institutional facilities



All mechanical configurations of the OMNILOCK® Standalone Access Control systems are available as OM100, OM300, or OM500 Keypad-only systems, OM2000 Magnetic-Striped card reader systems, or OP2000 Proximity card reader systems. All versions of OMNILOCK® systems are available in weatherized configuration for direct exposure to rain or snow down to -20 degrees, and card reader systems may be provided with or without keypads, (see photograph 8.) All OMNILOCK® systems feature a set of cold contacts that allow remote release by a receptionist switch or connection to a firelife-safety circuit. Certain customers and facilities desire special lock configurations from time-to-time; and OSI has always been known for responding to the needs of its customers. One such government customer requested that OSI

and are the only audit-

trail option available on the

market today.



8. All OMNILOCK® systems are available in a weatherized version (above left) that can withstand direct exposure to rain and snow and survive temperatures of -20 degrees. What is unique about OSI Security **Devices' Option-W** weatherized locks is that all electronics may be located on the outside of the door, meaning that no holes have to be drilled to install them! OSI now offers knob locks (above right) for customer applications that require knob locks in a non-ADA environment.

offer a knob lock for use on gates and tool cages.

Recently a DOD (Department Of Defense) directive was introduced that restricted the use of all handheld PDAs, cellular phones, digital cameras and anything considered to be a PED (Portable Electronic Device) from areas where classified documentation is stored or handled. Since the OSI systems have long been used by the most secure Government facilities in the world, it became immediately evident that a version of OMNILOCK® had to be produced that did not rely on the PocketPC or any form of PED. In late 2004, OSI began development of the SI (Serial Interface)-Version of OMNILOCK® system; and in mid-2005 the new OMNILOCK® Serial Interface locks are being installed at several key military installations. These systems program by connecting a data

interface cable directly from a laptop to the locking system. Once again, OSI Security Devices has proved that it can innovate to solve the problems



of its customers and can satisfy their ever-changing needs.

As new products like the Rentallock and Wireless Access systems emerge, OSI will continue to prove itself to be the most technically innovative and responsive company in the industry. OSI Security Devices is dedicated to ensuring customer satisfaction while maintaining a reputation as the manufacturer of the World's highest quality, most innovative security products in the industry for use today... and tomorrow!

For more information on the OMNILOCK contact: OSI Security Devices; Phone: 619-628-1000; Fax: 619-628-1001; E-Mail: sales@omnilock.com; Web: www.omnilock.com.

吅



# AUTOMATION Leco Door Products



by Jake Jakubuwski

hat do air cannons, door or components, automated production facilities, hollow metal door concepts, locksmiths and architectural

hardware suppliers have in common? With only a cursory first glance, you couldn't be faulted for thinking "Not much!"

When you add Ceco Door Products to the mix of seemingly disparate ingredients, a synergistic whole begins to manifest itself, even to the causal observer. Especially if you were privileged to tour Ceco's newly automated door manufacturing facility in Milan, Tennessee as I was several months ago, (see photograph 1).

Along with eight other editors from various trade publications, I was quickly captivated by the enthusiasm and graciousness of our host and president of the Milan facility Larry Denbrock, (see photograph 2). Mr. Denbrock along with a well-informed staff, made the tour a true learning experience, as Denbrock and his crew stepped us into the future of hollow metal door fabrication and production as determined by Ceco's new \$8.5 million dollar production line, (see photograph 3).

To paraphrase Mark Drake, Ceco's Director of Manufacturing Engineering, (see photograph 4), "This new line spells out a process that gives new meaning to the word efficiency. Our new automated door line is a 25-year leap in technology for Ceco. It charts a whole new future in the manufacture of steel doors and frames."

Drake, while helping guide us through the intricacies of Ceco's new production line stood by a dual-head laser cutting mechanism that can cut up to 750 inches of steel a minute, (see photograph 5).

Just shy of one year ago, on July 6, 2004 Ceco Door Products, one of the world's leading suppliers of steel doors and frames for commercial, industrial and institutional applications, brought their new automatic door fabrication and assembly on line. The activation of that automated assembly line represented not only the single largest capital investment by parent company ASSA ABLOY in 2004, it was a quantum leap forward in hollow metal door design, manufacturing technology and production.

"Ceco is one of the most modern manufacturing facilities in the industry," said Thanasis Molokotos, president of ASSA ABLOY North America, (see photograph 6). "The new line is the centerpiece of our strategy to more quickly deliver a superior product in a competitive marketplace".

After taking the tour and seeing the line in action, I think Ceco is, by Molokotos' definition, in the Catbird's position to

Continued on page 54

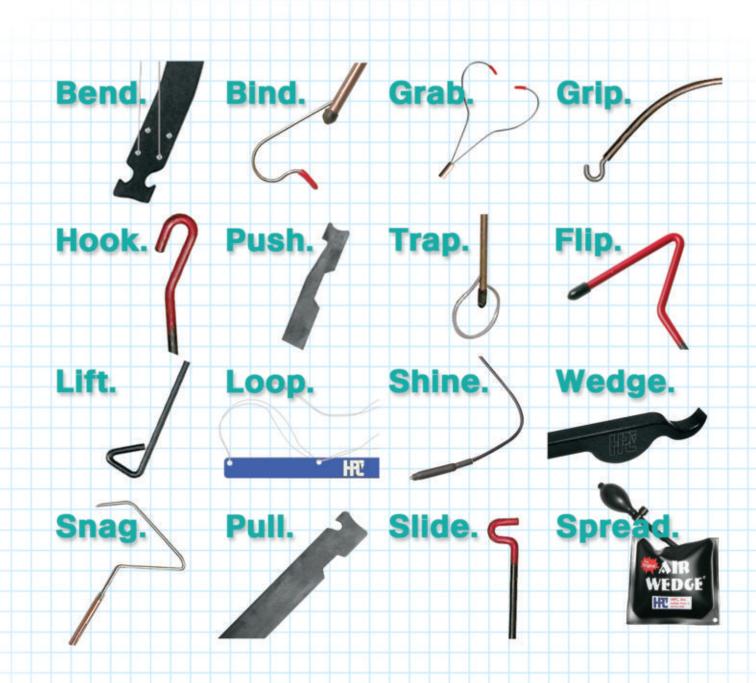


1. The Ceco Door Products facility in Milan, Tennessee.



2. President of the Milan facility Larry Denbrock.

### **CAN YOUR TOOLS DO THIS?**



HPC provides a vast variety of creative car opening tools that do all this and then some! So when you want to wiggle and worm your way into more vehicles, choose HPC!

Pictured from left to right starting at the top:
Flexi-Jim™ CO-84, Thru Car Clutch™ CO-81, Twin Hooks CO-85, Horizontal Clutch™ CO-75,
Over Hook™ CO-68, Big Jim™ CO-24, 5-Foot Super Snare CO-78, Switch Stick CO-80,
Super Killer™ CO-70, Lasso™ CO-73, Flex-A-Light™ FAL-10, Lever Wedge LW-100,
Fishing Pole CO-83, Super Jim™ CO-11, Short Double "L" CO-72, Air Wedge® AW-99.



HPC, Inc. 3999 N. 25th Avenue Schiller Park, IL 60176 USA Tel: 847.671.6280 Fax: 847.671.6343 www.hpcworld.com



3. Ceco's new \$8.5 million dollar production line.



4. Mark Drake, Ceco's Director of Manufacturing Engineering.

"...move quickly to deliver a superior product in a competitive marketplace." Personally, I believe my observations would also tend to substantiate Drake's contention that this new line represents a "...25-leap in technology for Ceco." Ceco has created a fast track answer to what I will call Doors on Demand!

With Ceco it's no longer necessary to have a minimum run order to make the manufacture of a door cost effective. Each specific feature of a given order no longer requires expensive down-time and retooling charges. The line is computer-driven and is capable of producing multiple door styles and configurations with varying hardware preps on demand.

For instance: If I order ten flush doors without hinge or hardware preps, three doors with special hinge configurations, one door that is foamfilled and ten doors that are raised panel doors with honeycombed insulation — the new Ceco automated production line considers that one order. When the line is in full swing it can produce that order at the rate of one door every 30-minutes!

From the start of the process to the completed door, less then thirty minutes are required to complete each individual door — regardless of the hardware configurations and other specialty preps that may be required to complete the order, (see photograph 7). Photograph 8, shows the finished door headed for the paint room.

The entire process takes place without that order being touched by a human being. Not that real folks aren't monitoring the process every step of the way and can halt the entire line at the push of a button in the event of a problem — but the human ele-

5. A dualhead laser cutting mechanism that can cut up to 750 inches of steel a minute.



Continued on page 56



6. Thanasis Molokotos, president of ASSA ABLOY North America.



7. The finished door headed for the paint room.

### THE NEW E-LOCK. MATCHING DESIGN. MATCHLESS SECURITY.



Schlage introduces the new E-Lock—a stand-alone access control solution with ultra-modern styling, designed to suite with our industry-leading, mechanically-

keyed D-Lock to provide a higher level of integrated security. Schlage's new modular E-Lock is designed to add electronic access control to your

facility and to suite with Schlage's D Series or L Series mechanical locks, providing architectural integrity throughout your facility. It can be used with existing magnetic Schlage's E-Lock stripe cards, proximity cards, fobs or iButtons already in place. The E-Lock is managed builds upon the proven D-Lock platform. by LockLink™ or LockLink Express software, offering many features of a network

(IR) Security & Safety access control system at a fraction of the cost.

© 2004 Ingersoll-Rand

To learn more about our new E-Lock, please call 1-866-322-1237.



8. In full swing the line can produce an order at the rate of one door every 17-seconds. From start to finish the process takes 30-minutes.

ment is not a prerequisite for the line to function as programmed.

Let's take a look at the process as explained by the Ceco team.

Mr. Drake, with arms outstretched directing everyone's attention to the new technology inside the 450,000-square-foot plant, says that the four-kilowatt lasers at the beginning of the line are but a small part of the startto-finish door manufacturing process, but they are among the most impressive features of this new facility, (see photograph 9). To the left of the cutter you can see the cylindrical lock prep in the skin of the door. Directly below the cutter, you can see the bottom hinge prep (completed) and the middle prep being cut.

"Not only do the lasers have a cutting speed of 750 inches per minute, but they also provide precision cutting and locations for hardware preparations," Drake said. "The lasers are a far cry from the old method of punching steel."

Editors Note: When fabricating parts, those parts can be either machined, punched, extruded or laser cut, also known as plasma cutting. Machining door preps in hollow metal doors is not a cost-effective method of incorporating the prep. Although punching is quick and cost-effective, the edge quality of the punched parts tends to suffer as the punch and die wears or lose

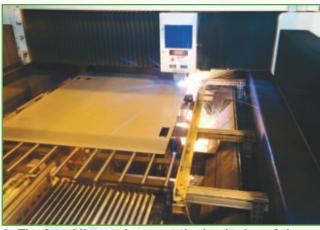
their clean shear ability, to the

extent that the part either requires further machining, or dressing, (see photograph 10). That extra process tends to render the savings realized by punching less appreciable. With the lasers that Drake talks about, the preps are all clean, sharp and do not require further machining or deburring.

Two separate conveyors carry sheets of steel that is precut to precise measurements, toward the line. The sheets are loaded automatically onto the

line using electronic data initiated by a trained operator, with each sheet verified for correct width, length and material thickness. The two cut pieces of steel are beginning an elaborate process along the new line that will transform them into a door, (see photograph 11).

From this point onward, the process is automatic. The machine constantly references itself to the doors in progress and continuously monitors each door's progress. As a built-in safety or quality control feature, there are humans all



9. The four-kilowatt lasers at the beginning of the line are among the most impressive features of this new facility.



10. Although punching is quick and cost-effective, the edge quality of the punched parts tends to suffer as the punch and die wears or lose their clean shear ability, to the extent that the part either requires further machining, or dressing.



form it into a door.

along the line that can, on a moments notice, stop the line in the event of a perceived anomaly in the production process, (see photograph 12).

Motioning toward the continuous flow of steel along the

Continued on page 58

#### PRO-LOK<sup>®</sup>

655 N Hariton Street Orange CA 92868 (714) 633-0681 • Fax: (714) 633-0470





Part# LT470 8pc. Mini Neon Pick & Driver Set Heat treated, chrome plated, chrome vanadium steel shafts with magnetic tips. High visibility handle, easy to locate. Net Weight 3/4lbs. (.34kg)

#### Includes:

- Curved Hook
- Offset 45° Hook
- 90° Hook
- Straight Pick
- 1/8" Flat Screwdriver
- #0 Phillips Screwdriver
- SD-15 Star Screwdriver
- SD-20 Star Screwdriver

Comes in handy storage case!

## Part# LT18 HEADSPECS

If you can't see it...You can't impression it!

Magnification Combinations! - 3 Different Lenses
MULTI-PURPOSE HEAD-WEARING MAGNIFYING GLASS
with Dual Light Source!

Ideal for impressioning, close observations, precision inspections, miniature parts, assembly, coins, stamps, checking circuit boards, reading resistors, detail work, reading and much more! Provides 100% user efficiency by leaving both hands free. Offers a wide field of vision and can be worn over prescription or safety eyeglasses. When not in use the HEADSPEC'S can easily be tilted up out of the way. The head strap is adjustable, with a Velcro tab for easy and comfortable adjustment to hold it in place for extended use. When more light is needed, simply turn on the light switches. Uses 2 AAA batteries (not included) per light. Packaged in a full color printed box.



There is a new addition to the PRO-LOK affordable electronic safe line. Due to the overwhelming success and demand for the GLSF-08 and GLSF-10 safes, PRO-LOK recently added a deposit slot model #GLSF-08S. Now, to compliment the current 3 models, PRO-LOK has just added a fourth model. The NEW GLSF-15 Laptop safe is ideal for dorms as well as anyone who needs a wider safe door to fit most laptop computers inside. Although designed to accommodate most laptop computers, this new safe size can be sold to anyone who prefers or is in need of a short but wide safe because of specific contents or space restrictions. The safe has 2 chrome bolts of 3/4" of an inch diameter for extra security.

- Easy to program & change your own combination in seconds!
- . Electronic security lock.
- Manual override key function.
- · Solid Steel construction for extra security!
- 4 bolts provided to anchor the safe down & 2 steel locking bolts, for added security.
- · 4AA batteries included to operate keypad.

#### Part# MABDUP2005 2005 Oar Oraning Unitate

2005 UPDATE FACTS & FEATURES:

The 2005 Update covers the latest foreign and domestic vehicles on the road. The page size is 5 1/2" x 8 1/2". FULL COLOR photos of each and every vehicle. The PRO-LOK Car Opening Update is the only manual that is completely printed in FULL COLOR! It is the best in the industry.

#### MABDUP2005 Includes New Models:

BMW X3, Buick LaCrosse, Buick Terraza, Cadillac STS, Cadillac XLR, Chevrolet Classic, Chevrolet Cobalt, Chevrolet Equinox, Chevrolet Uplander, Chrysler 300, Chrysler PT Cruiser Conv., Dodge Magnum, Ford Five Hundred, Ford Freestyle, Hyundai Tucson, Infiniti QX56, Landrover LR3, Lexus RX 400h, Lincoln Mark LT, Maybach Type 57, Maybach Type 62, Mercury Mariner, Mercury Montego, Pontiac G6, Pontiac GTO, Pontiac Montana SV6, Pontiac Torrent, Saab 9-2x, Saab 9-7x, Saturn Relay, Scion tC, Suzuki Reno, Volvo 50 Series, Exotic Saleen S281 and more...

Circle 343 on Rapid Reply

www.pro-lok-com





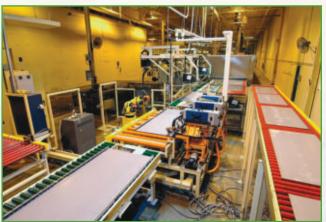
12. There are humans all along the line that can, on a moments notice, stop the line in the event of a perceived anomaly.



13. Sheets of steel are hitting the line every 17-seconds.



14. The robotic station has been programmed to weld a set of three hinge reinforcements in the cutouts created by the lasers.



15. The line conveys the two sides straight into an assembly station.

assembly line, Larry Denbrock, president of Ceco, notes that sheets of steel are hitting the line every 17-seconds. "In less than 30-minutes," he said, pointing to the steel as it disappears toward the lasers, "those sheets will become a door," (see photograph 13.)

Once the steel has matched the specifications of the particular door size to be fabricated, the two pieces travel independently toward a set of lasers. Each piece is then laser-cut for hinge and lock preparations. When the two pieces emerge from this set of lasers, customized hardware locations per customer requirements will be established.

"In addition to the superior cutting speed, the lasers reduced our minimum order quantity to one by eliminating changeovers for hardware preparations," Drake said.

"The laser hardware programs are fed to the controllers in the same sequence as the part process, creating a dynamic changeover process from one part to the next. A subsequent process also includes forming each sheet of steel on both sides simultaneously to create the formed sub-assemblies — which form the actual door later in the process.

"This next step is probably the most visual part of the line," Drake said, pointing toward a robotic arm that moves so quickly at times that it causes the eye to blur.

As the two pieces of steel travel along the assembly line, the robotic station has been programmed to weld a set of three hinge reinforcements in the cutouts created by the lasers, (see photograph 14). A single arm that towers over the line grabs the hinge reinforcements and feeds them into a series of smaller robotic welders at the precise location required for the door. The smaller robotic guns quickly weld the hinges in place in three successive steps.

Both sides of the door - still traveling independently - enter a130-foot long washing system designed to prepare the steel for its final metamorphosis. Five minutes later, the two sides exit the washer and pass through a drying process. After a computer validation of each piece to confirm a match between the two sides of the door, the line conveys the two sides straight

Continued on page 60

## Every Corbin Russwin® keyway you could possibly need!





#### MIDWEST WHOLESALE HARDWARE

888 707 8527

Visalia, CA Kansas City, MO

Orlando, FL 800 659 8527

16. The door being washed a final time.



into an assembly station, (see photograph 15).

"At this point, the two parts become a door," Drake said. "The assembly station was designed to automatically adjust to any size door it receives, and complete the assembly within the 30-minute cycle. Throughout the process, measurements are taken to ensure the highest quality product."

After the door has been washed a final time (see photograph 16), the finished door passes through a cured electrostatic painting process, followed by the door being fed into a 180-degree oven. Afterward, it's a quick trip to packaging, where another set of robotic arms unload the door from the line and place it into the proper cardboard packaging.

"This door," Denbrock says, "will either be shipped out immediately or placed in quickturning inventory."

The automated door line is designed to manufacture virtually any size steel door, using 16 to 20-gauge materials. In addition, the line can be programmed to manufacture 20 different styles of doors, including popular brands Regent, Imperial, Omega and Ultra/Legion. The line is 1,600 feet in length and is capable of processing a single door from raw steel to painted and packaged product in less than two hours.

"We can literally make one

type of door after another, whereas before we could only run a single type of door at a time," Denbrock said in the relative quiet of his office, two doors away from the fast-paced line. "As a result, we can run what we need, when we need it."

"From a customer standpoint, this means a better quality door, quicker turnaround, faster delivery and a virtually unlimited selection," he said. "We are responsive, flexible and can outfit entire floors of buildings more quickly than ever. We can customize door orders at a moment's notice, as well as offer quick turnaround on unique hardware specifications."

The previous door system went off-line seven weeks before the new line's launch. Drake and his team spent the first five months preparing for the transition, which included alerting distributors to the changeover and building up inventory for the seven-week gap between old and new.

"There were numerous long, sometimes overnight days, but the transition was generally smooth," Drake said. "We had the inventory in place to meet demand, and we had a team dedicated to making the line the jewel of the door industry."

Take my word for it, Ceco has developed a real winner here. The industry benefits from a new infusion of technology. The end users benefit from superior quali-



17. Ceco's Stormpro door after taken numerous hits from a 2X4 fired from an air cannon.

ty-oriented doors made rapidly, accurately and "to spec".

And from an installer's standpoint, my job just became a whole lot simpler.

Oh! I forgot the air cannon part of the equation! *Photograph* 17, is a shot of Ceco's Stormpro door after taken numerous hits from a 2X4 fired from an air cannon that impacted the door at 100 feet per second! Again, take my word for it — the door won!

#### **About Ceco Door Products**

Ceco Door Products, an operating unit of ASSA ABLOY North America Inc, has more than 800 employees at three manufacturing plants and nine distribution centers. It is one of the world's leading suppliers of steel doors and frames for commercial, industrial and institutional applications. For more information on Ceco Door Products, call 731.686.8345 or visit their Web site at www.cecodoor.com. Circle 388 on Rapid Reply.

#### National Auto Lock Service, Inc. 1-800-954-5454

#### **Bianchi 303 - High Security Automotive Key Machine**

\$ 1,799 + s&h



The Bianchi 303 duplicates high security laser and dimple type keys. The robust construction and innovative design results in an extremely durable, precise and easy to use key machine. The 303 is the tank of its class at 51lbs and the heavy casting reduces vibration resulting in less noise, longer cutter life, and better cutting tolerance.

- One-piece casting provides better tolerance and eliminates horizontal movement during cutting, common in two-piece roller guide designs.
- · Micro-switch activated and semiautomatic key cutting operation.
- · Large protective shield covers the entire cutting.
- Unique and safe single-mode system. Simply press the red button to calibrate and the black button to proceed with cutting.
- Electromechanical 360-degree calibration. Unlike competitive models, the horizontal depth and spacing (left to right and front to back) can be adjusted in addition to vertical depth.
- Capable of code cutting and duplicating additional lock systems using adaptors.

Free Mercedes Adaptor Bonus with purchase from Nat'l Auto Lock Svc



• We offer the largest selection of High Security Space & Depth Key Sets for originating a key.









• The widest selection of Dealer Only / Factory Keys.



National Auto Lock Service, Inc. 1-800-954-5454

## nterchangeable



by William M. Lynk This article was excerpted from the Interchangeable Cores Small Format book by William M. Lynk, available from The National Locksmith.

#### Decoding for the Control Key Bitting

Once you have marveled in the success of accurately measuring the pins in the core and have written them down, the balance is purely mathematical.

To determine the Control Key Bitting is simple, yet understanding the concept and the "whys" is somewhat more involved. The math is such:

#### **CONTROL KEY BITTING**

- 1) Subtract the Coded Number of the Top Pin from Coded 13.
- 2) The result is the Control Key Bitting for that chamber.

For example, if you determined that the Top Pin is a coded 10, then:

13 - 10 = 3

Thus, the coded number 3 will be the control key cut. Let's investigate why this magical "13" works so nicely.

As we learned from the Coded Distances discussed earlier, there always exists a coded factor of 10 between the two shear lines. In order for us to allow the Control Shearline to freely move, the Top Pin (driver) must be directly above the Control Shearline. This would then mean that the remaining pin stack is directly below. Again, this pin stack will equal a coded 23.

If we know
the Top Pin
coded length, we
can determine what
the Control Key
Bitting will be by adding it
to the 10 below it (a constant) and then subtracting
from 23 (total pin stack
length) to give us what the
coded distance BELOW the
Operating Shearline must be in
order for the Control Key to
move the Control Lug. This 2step formula is as follows:

#### Method #1

Top Pin Code + Constant of 10 = Subtotal

Total Pin Stack 23 - Subtotal = Control Key Bitting Code

To accomplish the exact same thing, we can state it another way. Since we already know the constant of 10 between shearlines, and the Top Pin length, we only need to determine the portion of the Pin Stack that is BELOW the Operating Shearline in order to create the Control Key bitting.

Since the Total Coded Pin Stack length is a constant 23, and, we know that part of the pin stack

will be below the Top Pin in the amount of coded 10 and is accounted for, that leaves us with a coded amount of 13 that must still be accounted for. That is, the part above the Control Shearline, and the part below the Operating Shearline must be determined. Thus, if we subtract our Top Pin from coded 13, we arrive at the Control Key Bitting.

#### Method #2

Unaccounted for coded 13 - Top Pin = Control Key Bitting

Let's look at these two methods by using an example to better illustrate. We can assume we have a core with the following Top Pins:

Continued on page 66

#### Using Method #1: Top Pins: 7 10 12 6 10 10 10 Plus coded Constant: 10 Subtotal: 16 Total Pin Stack 23 23 23 17 Minus Subtotal: 16 Control Key Code:



Global Innovators of Electronic Key-Cutting Machines since 1995 www.codepro4500.com

#### **ALOA SHOW STOPPERS**

CodePro 4500 Deluxe 4500 Industrial

**Electronic key-cutting machines!** 

#### **Product Overview**

- Electronic No Hand Cranks! No Inserts!
- Repeatable Cutting Accuracy: +/-.0015"
- Add/Store custom setup Codes (10-User)
- Over 780 manufacturers depths and spacing codes provided (3 digit).
- Sealed ball-bearing cutter shaft assembly.
- Powerful 1/4 HP 2.4 Amp fan cooled motor
- Plunge or Contour cutting modes.
- Cutting Cycle 18 seconds (average).
- Interface to: Ledger, Black Hawk, Treskat
- Vice jaw effectively grips Auto, Residential and Commercial keys, including: BEST, SCHLAGE, SARGENT, FORD, etc.
- . Warranty (Parts & Labor) 1 Year
- International models available.
- Tech Support: 24/7 (An Industry First!)

#### **INDUSTRIAL MODEL 4500**I

- Cutting cycle 10 seconds (average)
- User defined set-up codes: 50
- Stainless steel cutter shaft & guide rods
- · Powder coated finish.
- Warranty: 5 years; Free Upgrades

## Affordable Accurate Reliable

SHOW ONLY PRICING
INQUIRE NOW
ALOA BOOTH #1627

Offer extends ONLY to show attendees



As featured in Locksmith Ledger & National Locksmith

DISCOUNTKEYMACHINES.COM
"THE KEY MACHINE SUPERSTORE"

800-332-8724/407-352-1532

#### Continued from page 64

Our Control Key Bitting using Method #1 is: 9 7 6 3 1 2 0. Let's try the same Top Pin combination using Method #2:

Method #2: Unaccounted for 13: 13 13 13 13 13 13 13 Minus Top Pin Code: 6 10 12 11 13 7 Control Key Code: 2

As you can see, we have calculated exactly the same Control Key Code/Bitting. Sometimes a picture can more aptly show the same thing that many words might clumsily express. Please study the diagram labeled as "Minus 13 Diagram" on page 125 in the Addendum to illustrate WHY these two methods will calculate and give the identical result.

In that diagrammed example the Top Pin is a 6, Control Pin is a 4, Master Pin is a 7 and the Bottom pin is a 6. The Pin Stack is labeled as 23. Notice the Constant 10 of Area B. This leaves only Area A and Area C to calculate. Since the Top Pin in Area A is a 6, and we desire it to be at the Control Shearline, we now know the coded distance for Area A, leaving only Area C to be determined. Thus, we can subtract the total of 16 (Top Pin 6 + Constant 10) from the Pin Stack 23 and determine that the portion of the Pin Stack to be **BELOW** the Operating Shearline in Area C must be a 7 cut (23 minus 16 = 7) for our Control Key. Or, 23 minus 10 Constant = 13 remaining. 13 remaining minus Top Pin 6 = 7 for Control Key bitting.

The main idea here is understanding the Coded Distances. In determining the Control Key bitting, we are only concerned in placing the Top Pin just above the Control Shearline. If you grasp that concept, then it follows that the remainder of the Pin Stack must fall directly BELOW that line. Also, SOME combination of 10 will fol-

low below. What the exact combination is exactly remains unimportant, but WHAT falls directly below the Operating Shearline is what will

matter. In the previous example, the entire Bottom 6 Pin plus a small portion of the Master 7 Pin

were needed to fall below the Operating Shearline so that the Control Shearline would move freely. In other words, the key cut must match that lower portion of the pin stack in order to move the Control Lug. The Operating Shearline is of no consequence to us at this point, as you can see.

#### **Decoding Using** the X80 Formula

If you do not have the coded pinning charts available, or wish to mentally calculate the codes, here is another method that will create the same results. It is based on the concept that each and every consecutive increment in the A2 system is .0125" in depth. Mathematically, you can do the following three steps:

#### **X80 METHOD**

- 1) Using your micrometer, MEASURE the top pin
- 2) MULTIPLY this micrometer length by 80
- 3) Increase (round up) to the nearest WHOLE NUMBER

At this point, you now have the coded number of the top pin and can use either of the two methods described earlier (I just subtract from 13) to arrive at the Control Key bitting. As you can see, the X80 method or coded chart method (A2 SFIC Chart) delivers the exact same reading. I personally find the use of the A2 SFIC Chart much quicker and less cumbersome.

#### **Decoding for the Master Key**

Decoding for the Master Key (if your core is part of a master keyed system) is not an easy task. There is no single rule to follow in order to accurately determine this bitting.

First, you must be somewhat versed in masterkey theory. There are a number of books available to the locksmith on this topic. Secondly, general masterkey rules for standard pin tumbler cylinders also apply to I-core work.

If you are unsure if the system is masterkeyed, examine the number of pins in each chamber. If no more than three (3) pins per chamber are used, it is NOT a masterkeyed core. Four (4) pins per chamber indicate a masterkeyed core.

Depending on the MasterKey Level, it is safe to assume that one chamber will have either a zero or other shallow cut, prohibiting someone from altering a shallow cut in an operating key (change key) into a master key. That is, if proper masterkeying rules were followed. Also, if there are a variety of masters and submasters (incidental masters) within the masterkeyed system, some chambers might not be altered from core to core (they are HELD instead of progressed). Often times the last three to four chambers are progressed to create useable operating keys for the system.

To decode for the Top Master, these factors must all be taken into consideration. The Top Master refers to the highest level of master key in the system. The remaining masters and submasters will show up within the sys-

Continued on page 68



### **JAMB JACKET**

#### "THE DOOR JAMB REINFORCER"

Whether it's damaged by a crow bar break-in or someone's carelessness with heavy equipment slamming into the door frame, "Jamb Jacket" is the minimal cost solution.

- Ropairs and covers damaged and splitout door jambs without the expense of replacing the whole jamb.
- Adds reinforcement to healthy undamaged jambs for additional security.
- 72" length can be used to protect door jamb from cart and gomey damage.
- Non-handed. Can be used on right or left hand doors.
- Designed to cover standard 1/2" rabbeted jamb.
- Finished in Beige Powdercoat finish for durability. (May be regainted to matchexisting frame.)
- "Jamb Jacket" is recessed to accommodate T-strike. Available in 24", 36" and 72" lengths for 1%" and 1%". doors. Supplied with strike plate and mounting screws.
- "Econo Gard" is available in 16" lengths only and is not recessed to accommodate T-strike. Packaged with mounting screws.

JJL-138-24 for 14/4" Door...24" Long Plate JJL-138-36 for 17/4" Door...36" Long Plate JJL-138-72 for 11/6" Door...72" Long Plate JJL-134-24 for 17/1 Door...241 Long Plate. JJL-134-36 for 17/1 Door...36" Long Plate JJL-134-72 for 1 1/2" Door...72" Long Plate JJB-134-24 for 17/ Door...24" Long Blank Plate

J3B-134-36 for 17/1 Door...36" Long Blank Plate

JJE-138-16 for 11/-" Door...16" Econo Gard Plate JJE-134-16 for 17/1 Door...16" Econo Gard Plate



1825 Via Burton, Anaheim, CA 92806 714/772-5202 FAX 714/772-2302

AVAILABLE FROM YOUR LOCKSMITH DISTRIBUTOR!

@1854 Vajer V(g., ric.

#### Continued from page 66

tem and thus, are irrelevant at this point.

The only true effective way to arrive at the Top Master (Great Grand Master, for example) is to compare a number of cores from the system. Three to four cores could accomplish this. Then you can compare how the change keys differ from the various masters in the system. More on MasterKeying I-Cores will be presented in Chapter 13.

#### Decoding for the Operating Key (Change Key)

This decoding is quite a bit more simple than decoding for the Master. Firstly, you should have the core present to test. Also, using the Bottom Pins (in combination with the master pins, if utilized) will usually work.

A word of caution: Depending on the masterkeyed level, change keys under the same master (or submaster) will have most of the cuts exactly the same, with the exception of usually 3 to 4 chambers, and usually in consecutive order. This accommodates the arrangement of the cores within the larger system.

#### The Minus 13 Dilemma

While decoding a core I once discovered either a factory pinning error or a premeditated attempt at rendering traditional decoding non-workable on this particular core. If it was deliberate, using the "Minus 13" approach from the Top Pin coded length would not create a workable control key. Perhaps this was an added security measure. However, if we assume it was a factory mistake, it would not have been discovered by testing with the correct control key, operating key or masterkey(s). Let me explain.

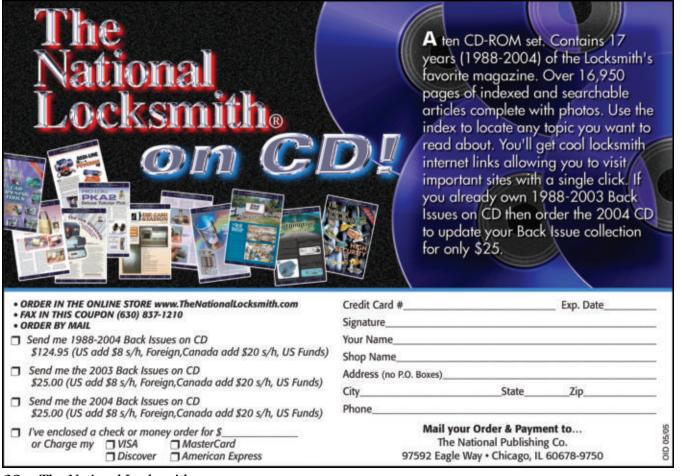
The pinning error (if it was such) only occurred in Chamber #7 of this masterkeyed core. If you decoded this core by remov-

ing only the Top Pins for measurement and discarded the remaining pins (as some say to do), a workable Control Key for this core would have been impossible since you would have had no indication which chamber (or chambers) were faulty....or "different."

In frustration I re-measured every pin in each chamber. I quickly noticed that in the first chamber, the pin stack equaled 24. After measuring it three times I realized my measurements were correct. I then measured all other chambers, but found nothing else irregular.

If this was an attempt at thwarting a quick decoding, they picked the best possible chamber to do it. Chamber #1 is the last chamber affected by a key, therefore it is proportionally the least worn. Logically, the last chamber (Chamber #7) must endure seven movements from an enter-

Continued on page 70



## OUR 14 PIECE SYSTEM OPENS

## OF ALL CAR OPENINGS



One Z-Tool," plus 12 additional tools and one manual will open 100% of all possible car openings. Our Grand Master Z-Tool System is the most comprehensive, streamlined car opening system available. You will never go back to a 50 piece kit again. The Grand Master Z-Tool System is simply the best.



You will never go back to a 50 piece kit again!

Slide Lock Tool Co., 1166 Topside Road, Louisville, TN 37777

1-800-336-8812 • 1-865-577-8470 • Fax: 1-865-577-5936 • Online: www.z-tool.com

#### Continued from page 68

ing key and seven more for its removal. The first chamber only two, by comparison. This would give the spring in Chamber #1 added life.

Also, adding one increment to the pin stack in this specific chamber would tend not to place an overwhelming burden on the spring, especially if the cut was a shallow one on all keys in that position.

Below is the Pin Stack combination for this particular core.

You can probably see that the bottom and master pins would still operate the master key(s) and change keys correctly. However, we must allow for an additional coded number with regard to the Top Pin.

The actual 10 Top Pin would indicate a 3 bitting for the Control Key, however, it would not work if you used the standard Minus 13 Method. If you think back to the Coded Distances dis-

CHAMBERS:	1	2	3	4	5	6	7
Top Pins	10	10	7	4	11	6	7
Control Pins	6	6	8	16	6	8	8
Master Pins	2	6	6	2	4	4	6
Bottom Pins	6	1	2	1	2	5	2

cussion, the Pin Stack is NOW actually 24. We know that a constant of 10 exists between shearlines. If we subtract:

24 Pin Stack Total - 10 Constant = 14 Unaccounted

Then we subtract the 10 Top Pin Code from the 14 Unaccounted:

14 Unaccounted - 10 Top Pin = 4 Control Bitting

Our correct Control Key bitting of 4 now works. Incidentally, it worked fine on all the other cores in the system. The correct Top Pin of 9 should have been factory-inserted into the chamber to reach the acceptable Pin Stack of 23.

You see, if the factory accidentally (or intentionally) alters a top pin by adding/subtracting an increment

value, no detectable problem exists since the Control Shearline (or the Operating) Shearline is not affected. Perhaps problems may ensue later with the core's operation, but this may not be discovered during factory pinning/testing process.

All in all, this is why I advise to NEVER discard the remainder of pins before carefully decoding the entire core. Mistakes do happen, but you needn't waste your time by being hasty. Remember: A core SHOULD have no more than a Coded 23 pin stack.

ΤΙL



## KEYCONTROL

#### More security. More convenience.

The first and only patio door lock with a rekeyable cylinder function.

## NEW Vnds Series

convenience series patioguard

#### THE MOST IMPROVED FEATURES

Imagine, a smooth entering double sided keyway, rekeyable cylinder, and a more convenient installation. All these improvements and more have arrived in the new VNDS from PatioGuard.

#### THE MOST NATURAL FINISHES

The VNDS has three finishes to provide versatility for any application. Standard finishes include 32 (Silver), 10 (Brown), and W (White). Other finishes are offered when quantities permit.

#### THE MOST PRACTICAL PURCHASE

The Patioguard series and other KCS products can be found at your local distributor or order online at www.keycontrolspecialists.com.

Call 1-800-397-4631 for more information





Circle 329 on Rapid Reply



ummer is a great time to increase incremental sales while providing an important, potentially life-saving service to your customers.

Locksmiths have many opportunities to generate additional sales to homeowners and to property managers and owners of apartment and condominium complexes. When you visit a residence or multihousing unit to repair or replace a lock on a door, auto, garage or storage unit, be sure to examine all gates around the property as part of your safety audit. Think of each gate as another door. You can easily increase your sales and profits through add-on sales of gate latches and hinges.

Most residential properties have fences, either around the property line, or around a pool or other hazardous feature. Fences are usually erected to keep unwanted visitors out and to protect property, but fences around pools can provide an additional benefit. Not only can they keep children in the neighborhood from entering the pool area without permission, if properly positioned between the residence and the water (isolation fencing), they can keep toddlers from getting into the pool area if they've inadvertently gotten out of the residence unsupervised, (see photograph 1.)

When you're making a visual survey of the property, look for things like tricycles, which indicate that small children live on the property. Don't hesitate, though, to discuss pool fencing with people who have no children



1. Keeping children from entering the pool area unsupervised.

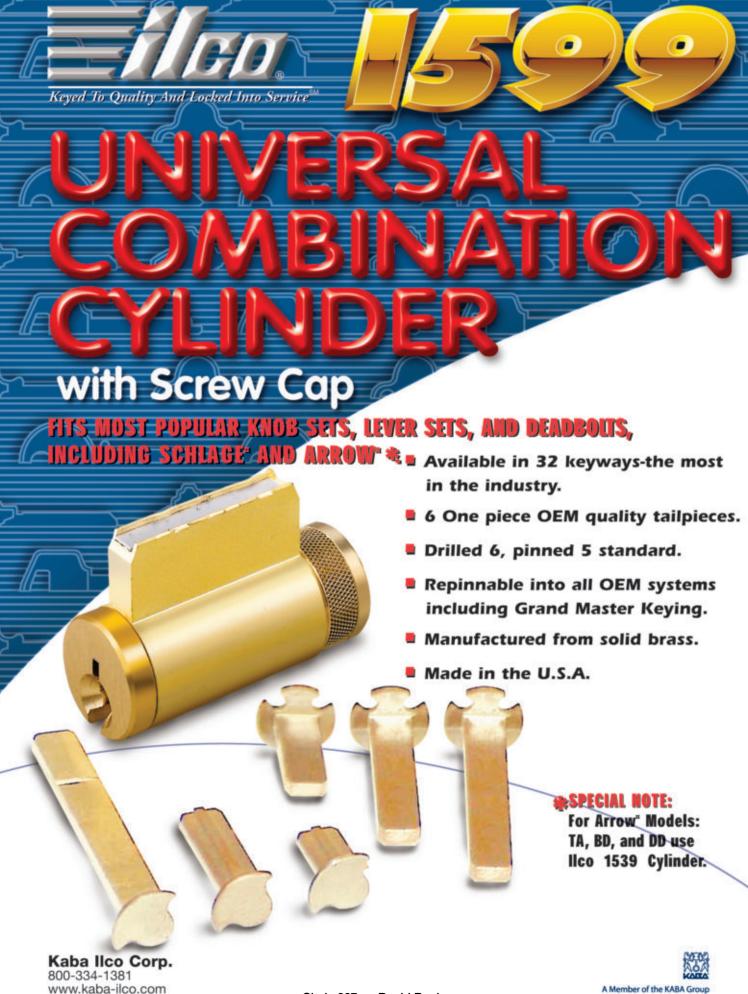
living in the home, or managers of apartments or condos. Tell them the facts, per the Consumer Product Safety Commission (CPSC): 35% of all toddler drownings take place at a home other than the child's residence.

Fences with effective gates can also be used to keep children from getting out of the yard or property and into traffic, and to keep pets in their enclosure. Be sure to take pet doors into consideration, surveying them to make sure toddlers cannot get out of the residence through these openings, and that they're not so large that an intruder can get in.

When you consider gates as doors, you'll discover that many gate latches or locks no longer self-close or are defective in other ways. Homeowners or property managers will call you if the lock on a front door is broken, but when they can't get a gate to close by itself, they frequently view it as an irritation rather than understanding the scope of the safety hazard that's present.

Locksmiths typically don't erect fences, yet when a latch or lock is defective, homeowners or property managers are more likely to call a locksmith than a fencing contractor. Making contact with your local fencing contractors so they know you are available to service or replace gate latches or locks can provide additional business opportunities. Your expertise can help to ensure that gates effectively close and latch each time, even years after installation. You can also ensure gates are key lockable.

Most parents vigilantly supervise their children, but maintaining direct visual contact with a toddler every moment of the day is virtually impossible. A fence between the residence and the pool with an effective, self-closing and self-latching gate can buy adults the few minutes needed to reestablish eye-to-eye contact with a child when it's been momentarily



Circle 327 on Rapid Reply

#### Continued from page 72

lost after a brief distraction like answering the phone or door, cooking dinner or checking email.

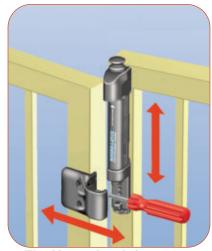
A 2003 study by the Arizona Child Fatality Review Program reported that, out of 173 children who drowned in backyard pools in that state since 1995, isolation pool fencing in working order could have prevented 90% of the deaths. Extensive child drowning studies in Australia show that 90 percent of "unauthorized" access by toddlers to fenced pool areas occurs as a result of a gate being inadequately latched or propped open.

For a gate to close completely every time, it must be in proper working order. Traditional mechanical or gravity latches can move out of alignment, corrode, or be affected by paint or rust so that gates no longer latch. They must be frequently inspected to ensure they're in working order.

The homeowner or property manager should be reminded that the decision to use a \$3 gravity latch over a high quality gate latch could result in the tragic death or brain injury of a child. How much is a child's life, the security of a family, or the protection of a property's assets worth? What is the property owner's liability if a child drowns after entering a pool area through a faulty gate?

You wouldn't use inexpensive, ineffective locking hardware on the front door of a home. Keep in mind the fact that a gate is another doorway into the homeowner's or manager's property. To protect against liability, locksmiths should ensure that they use the safest self-closing, self-latching hardware available on every gate.

D&D Technologies' awardwinning Magna-Latch( magnetic, self-latching safety gate latch and Tru-Close( self-closing hinges were designed to meet the Australian Standards, some of the most stringent in the world. The Magna-Latch features a powerful, high-tech magnet that draws the latch bolt from one housing into the other, latching it securely without having to overcome mechanical resistance during closure. Magna-Latch and Tru-Close products are rust-free, and are fully adjustable, horizontally and vertically, at any time after installation. The Magna-Latch houses a rare-earth magnet, so no electricity is required.



2. The Magna-Latch features a powerful, high-tech magnet that draws the latch bolt.

Both the top pull (longer) model, which was designed to bring the latch grip to the required 54" height when mounted on a 48" gate, and the vertical-pull model, designed for gates at least 5-feet tall or for gates on pet enclosures, are keylockable, (see photograph 2.)

Check with your local building department for area regulations regarding the required height at which the latch release must be mounted.

Note that pool gates on private homes should be self-latching, but never self-locking, as self-locking gates may prevent quick access during an emergency and may also encourage people to prop open a gate, particularly during a pool party when many people without keys want access.

Residential gates should be keylockable, however, for times when no one is at home.

Apartment and condominium gates may require self-locking gate hardware, so that only residents with keys can enter the area. D&D Technologies will be releasing a new line of self-locking or "storeroom function" latches later this summer.

Even if a gate doesn't surround a pool, it's important that it close and latch properly to protect the residential property. How many times have you seen side yard gates with rusty, inexpensive gravity latches that no longer latch without significant effort? How many times is a spring gate closer rusty or out of adjustment, so that it no longer self-closes the gate?

D&D has other gate products that can solve these problems. The company has several latches that are designed for privacy or pedestrian access gates. Some models have adapters to fit round-posted gates, such as those on chain link.

The company's award-winning Lokk-Latch PRO® has been called the most sophisticated privacy and security gate latch ever devised. This two-part latch can be operated and locked from either side of the gate. It can be keyed-alike to household doors or master keyed. Formed of durable polymers with 316-marine grade stainless steel components, the Lokk-Latch PRO will not rust, corrode or stain.

If you see gates with ineffective or unsightly spring gate closers, you can replace them with one of nearly 30 models of Tru-Close® hinges by D&D Technologies, (see photograph 3.) Tru-Close hinges feature an internal stainless spring, so external springs are no longer necessary.



#### **AUTO-SECURITY PRODUCTS**

Ph: 425-556-1900 Fax: 425-558-1205 www.carlocks.com

## T-CODE

#### T-CODE CP2

"COMPLETE PACKAGE #2" ...... \$4599.00

- Plug into your cigarette lighter as an optional power source
  Also works on competing programming tools
- Programs Transponder-Equipped:

Ford, Honda/Acura Chrysler/Dodge/Jeep/Plymouth (Program Remotes) Mitsubishi, Nissan/Infiniti, Cadillac Catera, Audi/VW Toyota/Lexus (Program Remotes)

**Available at your favorite ASP Distributor** 







- ➤ PAY-AS-YOU-GO
  Transponder Key Programming
- ➤ Purchase Electronic

  "Key Tokens" as you need them.
- NO UPDATES to purchase ever.
- Download "Key Tokens" from the internet.
- Program a car use a "Key Token" it's that simple!

#### **COMPLETE MVP System**

w/ 5 Key Tokens......\$1299.00

ASP, INC. P.O. BOX 10 REDMOND, WA 98073

#### Continued from page 74

That's not the only benefit of Tru-Close hinges, though. These hinges, formed of space-age, glass reinforced engineering polymers, are rust-free for life, and easily adjustable by the homeowner or property manager. All Tru-Close hinges are tension-adjustable, but several models, like the new Mini-Multi Adjust Hinge, are also adjustable both vertically

and horizontally. All D&D Technologies' products come with a limited Lifetime Warranty, and there are models to fit metal, vinyl, wood and chain link gates.

Magna-Latch has been tested to 400,000 cycles, and Tru-Close hinges are tested to 200,000 cycles. Tru-Close hinges have recently been re-engineered, and some heavy-duty models are now rated to handle point loads up to 1000 lbs.





3. One of nearly 30 models of Tru-Close® hinges available.

Products are designed for ease of installation, with comprehensive installation instructions, fitting jigs and templates. No welding or special tools are required.

The ultimate bottom line: You only stock "the good stuff." Make sure that includes D&D Technologies' award-winning safety gate hardware. Your recommendations will not only have the potential of increasing sales and improving profitability; they can protect the occupants and property of the household. Your bottom line will increase, your profit margin will improve, and you just may save a life!

D&D Technologies can help you get this important message out to your customers and potential customers. For free copies of D&D's "Blueprint for Gate Safety," pool safety tips, a full-line product catalog or other information, call (800) 464-6400, ext. 292 or e-mail mwilliams@ddtechusa.com.

Maureen Williams is a member of ASTM F14 committee for fencing and ASTM F15 committee for consumer products. She chairs a task group working on a standard for self-closing, self-latching gates. She is president of the National Drowning Prevention Alliance, a board member of the International Aquatic Foundation, and active with several drowning prevention coalitions. She is public relations manager for D&D Technologies.

#### AMAZING HOW THE RIGHT COMBINATION CAN HELP YOU TURN A PROFIT



For safe, quick entry the Powerbolt® 1000 Touchpad Keyless Entry system is the ideal electronic home access system. No fumbling for keys or accidental lockouts. Put state-of-the-art technology on every exterior door!



**UPGRADE OPTION** Offer keyless entry as a homeowner upgrade. Powerbolt easily replaces existing door hardware and fits standard 2 1/8" door prep. No wiring is necessary; Powerbolt works on 4 AA alkaline batteries.

**PERSONALIZED PROGRAMMING** Homeowners may choose any 4 to 8 digit personal security code and change it easily and as often as necessary. Two-code capability allows for a neighbor or cleaning crew to have temporary access.

**KEYLESS ENTRY** prevents lockouts and is so easy to use. Press a single touchpad button to lock. To unlock, enter a personalized security code. Includes two conventional keys for back-up use. Indicator light warns of low battery.

Powerbolt features a full 1" projection deadbolt and is available in three finishes—Lifetime Polished Brass, Satin Nickel and Venetian Bronze. Kwikset offers a variety of levers and knobs that complement the Powerbolt.



To unlock your opportunity, contact Kwikset at 800-327-LOCK or visit us at www.kwikset.com.

# BEGINNER'S ORNER'S ORNER'S 1999 Ford F-250 Door Rekey



by Ken Holmlund

ometimes people don't seem to appreciate how easy it is to get into a vehicle, especially when the intruder is determined to do so. In this case, the customer was afraid her ex-partner would enter the cab of the vehicle and "trash" it.

I explained as best I could that it was easy to get into a vehicle and rekeying it would not change that fact, but she said it would be a deterrent, which it could be for some people. I also told her she would be left with two keys if she did not have the ignition done also. She did see the wisdom of that move and agreed to have the ignition done as well.

If the vehicle has two keys standard, one for the ignition and one for the doors and trunk, I encourage the changing of the ignition before the doors. In this case, the same key worked both, so it made sense to change both locks.



1. The vehicle in question was a 1999 Ford F-250, a very common vehicle in Eastern Montana ranch country.



2. The door panel for the F-250.



3. Removal of the panel is really quite easy. Step one involves removing the light cover on the lower portion of the panel. It has a slot for insertion of a screwdriver and the cover pops off easily.



4. Once the light cover is removed a 7mm. screw is seen and removed. Step two for the removal of the panel involves lifting the control unit for the door and window controls. This is accomplished by lifting the front of the panel with a screwdriver.



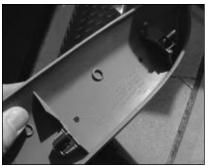
5. Sliding the panel forward.



6. A second 7mm. screw is located on the backside of the opening.



7. The final step before removing the door panel is to remove a small panel on the doorpost.



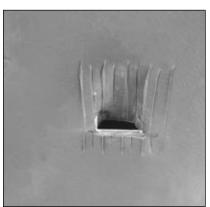
8. This panel is held in place with two posts. Lift the panel with a screwdriver and it will pop off without much effort.



9. This connection just turns about 45 degrees and slides out for the replacement of the bulb if needed.



10. The door panel is held in place with 9 legs.



11. These legs slide into an opening in the metal door body. Set the door panel aside so as not to get in the way of the job.

## ANOTHER BULLSEYE

#### Replaces Diebold 175-05 Zone Locks

Models B175RH & B175LH

- Exact interchange
- Brand new Bullseye SD lock
- No need to search for used locks
- Cost Effective

For matchwork, simply replace guard levers from old locks into the new B175 locks. B175 guard lever/spacer kit available.



#### Replaces S&G 4500 & KABA IIco 5400 series



Models B541 1/2 (Fixed Renter/Fixed Guard) B501 1/2 (Changeable Renter/Changeable Guard) B542 3/8 (Fixed Renter/Fixed Guard)

B502 3/8 (Changeable Renter/Changeable Guard) Brass & Nickel finish (call for availability)

- Exact interchange
- Brand new Bullseye SD lock
- No need to search for used locks
  - Cost Effective

#### Replaces Mosler 3175 Rapid Set

Models B3175-BR (Brass finish) & B3175-NI (Nickel finish)

- Exact interchange
- Brand new Bullseye SD lock
- No need to search for used locks
- Cost Effective

For matchwork, use setup key to open lock. With lock in unlocked position, remove guard set up and replace with actual key.



#### Replaces Mosler 5700

Model B5700 SM75 Guard Standard

- Exact interchange
- Brand new Bullseye SD lock
- No need to search for used locks
- Cost Effective

For matchwork, simply replace guard levers from old lock into the new B5700 lock.



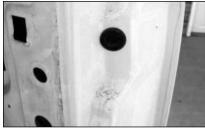


To place an order, call 1-800-364-4899 or email today lesa@bullseyesdlocks.com

(MasterCard and Visa accepted) Visit us on the web @ www.bullseyesdlocks.com

> Bullseve SD Locks 2033 Parasol Dr. Lexington, KY 40513 859-224-4898 / Fax: 859-224-1199





12. We are now ready to get to the lock mechanism. On the side of the door you will find a rubber grommet. Remove the grommet and you will have access to the first of two 12mm screws that hold the lock and handle in place.



13. I found the screw easy to remove with my hands once it was loosened. Ford has seen fit to leave a reasonable sized opening in the door to work through. This opening is wonderful since the second 12mm screw is located behind the framework for the window slide and will need to be removed by using a crescent wrench or open ended wrench.



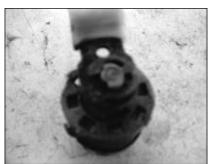
14. Once the screws are removed, the handle and lock mechanism will twist and give access to the lock cylinder.



15. The cylinder is held in place with a horseshoe spring.



16. The cylinder is the common Ford 8 wafer variety.



17. The cylinder slides to the back of the opening and is held to the linage with an e clip and the common Ford plastic cam. It can be removed by taking the "E" clip off and leaving the plastic cam or removing the cam from the linkage. Either way works fine and is a matter of personal preference.



18. The cylinder is removed from the body by removing the cap with a small screwdriver. The cap can be reused if care is used when you remove the cover. Slip the cap off and the cylinder slides out the front side. It is the typical Ford 8 wafer mechanism.



19. I use the STRATTEC Ford 8-Cut Kit model 703373 for the repair parts.



20. The kit contains the pins, springs, caps and other small parts that seem to vanish on occasion. The code series for this Ford is the X series and can be from 1X to 1706X.

Rekeying the cylinder is a very straight-forward job. The wafers come from both sides so you will need to keep them covered with your fingers as you work on the ones you need to replace. The door contains wafers in positions 1 through 6. To rekey the lock you will not need to replace all the wafers, but I suggest at least changing four of them and making sure the replaced wafers are at least two cuts different from the replaced wafers. Ford is known to have a bit of slop in their locks and replacing a wafer with another of just one difference can result in the old key still working the door. Ford keys are famous for wear as well and that can contribute to the problem as well. I strongly suggest trying a copy of the old key if one is available.



21. Replacing the cylinder in the mechanism is a matter of slipping the cylinder back in place and replacing the retainer spring.



22. The retainer has a correct and an incorrect way to install. The shorter leg of the spring should be to the opening side of the door. Be sure the spring fits securely in the slot and holds the cylinder in place. Check to make sure the cylinder is correctly installed relative to the outside of the mechanism. Place the complete mechanism into the opening and reinstall the two 12mm screws that hold it in place. Check to make sure the key will lock and unlock the door before going to the next step.

To replace the door panel, you will need to reattach the light and fit the nine legs into the slots as shown in photograph 11. It can be quite a trick to get all of them in place at one time but it is necessary to do so in order to hold the door panel securely. Check the correct insertion of the legs by sliding your hand around the outside of the panel to be sure it is close to the metal of the door. If you haven't gotten all the legs in place you will need to lift the panel and reinsert the legs. Like I said, this can be quite a trick to accomplish.

Replace the two 7mm screws as shown on photographs 3 and 6. Replace the light cover and the control panel. Put the cover back on the doorpost and the job is done.

I said at the beginning of this article that I suggested the owner have the ignition rekeyed to match the door and that is done by removing the ignition lock in the typical Ford way.



23. Turn the key to the on position and insert a small tool into the opening Ford has placed to get to the lock. I like to use the long Allen wrench that comes with Corbin-Russwin deadbolts. It is long enough to reach and strong enough to do the job.

Keying the ignition is a matter of removing the necessary wafers and replacing them with the new wafers. The ignition contains wafers 2 through 8. Again a couple of parts can get lost but they are included in the STRATTEC kit as well.

One factor you should consider when quoting a price for this job is that the key can be a transponder on some Ford pickups. Be sure you know what you are working with before giving the customer a price. If you don't have the tools to do the job, either get them or give the job to someone else. The job took me about 2-hours total.

The only special equipment I needed for this job was the STRATTEC keying kit since the keys were not transponders. You can get the kit from your supplier and get more information from:

#### STRATTEC Security Corp.

Phone: 414-247-3333
Fax: 414-247-3329
Web: www.strattec.com

TNL

#### Mark Your Keys Key Shop Name \* Security Code

Special Instructions
CUSTOM STAMPS
We can customize an
Evers stamp with your
tredemark, code,
special lettering, shop
name etc. Submit
dusign, lettering and
size area for quote.

ORDER TODAY
DIRECT FROM MANUFACTURER
STOCK IMPRINTS: "Master," "Do
Not Duplicate, ""Do Not Copy," "U.S.
Property," "Property of U.S. Gov't,"
and "Unlawful to Duplicate"

#### Key Stamp Holder



for 3/8" x 3/4" Shank

Quick and simple to use for faster, pasier marking

NO. E6H

Security Code Stamps 500 different symbols

**FREE BROCHURES** 

HENRY A. EVERS CORP. 72 N. Oxford St., Providence RI 02905

TOLL FREE: 1-800-55-EVERS
Phone: 401-781-4757 Fax: 401-781-9581

Circle 314 on Rapid Reply



LOCKS, SAFES, AND SECURITY

is ALSO AVAILABLE on CD.

LSS+ VERSION 5.0
ELECTRONIC INFOBASE
A complete reference for police,
locksmith, and security.

#### LSS+ Contains:

- · Advanced search engine
- 5000+ new images
- · Four Books included
- 30+ hours audio/video
- New and updated data in Version 5.0
- 6 Volumes (Locksmith)
- 14 Volumes (Government)
- · Three Security Levels

www.security.org

# TEShter Sure Next Time, For Sure

ombination locks have never have been easy for me to open," a customer admitted to Don over the phone one morning, "But this time, it's really serious."

"What seems to be the problem?" Don asked.

"Well, I think we're in real trouble. You see, we recently bought an older house, and there's a floor safe in one of the rooms that we can't get open."

"What's the matter, didn't the seller give you the combination?"

"They gave us the combination, even had us run it a few times to be sure we could open it. The problem is, my husband thought it wasn't very smart, having a safe that somebody else knew the combination to, so he decided to change the combination and now we can't get in it."

"Un huh!" Don said knowingly.

"I guess he took off the old combination and messed up trying to install the new one, so now nobody knows what the combination is. That's what happens when you try to do it without knowing how."

In the privacy of his own office, he didn't try to keep the smirk off his face, but it quickly faded when the lady responded. "Oh, no. That's not the problem at all. He installed the new

combination without any trouble, just followed the directions the previous owner gave him. The problem is, neither of us can remember where we put the new combination."

"Didn't you write it down somewhere?" Don asked.

"Sure, only now we can't find it." She sighed before continuing. "You see, my husband read somewhere that most people with safes choose numbers that have some meaning in their lives and they write the combination in their phone book, or in their address book, or somewhere near the safe. Apparently, those are choices any burglar knows about, so he was adamant about choosing random numbers and not writing them where anybody would ever think to look. How could we know that would include us? We drew the numbers out of a hat and were very careful to put the combination in an unlikely place. But now neither one of us can remember what it is or where we put it. This makes me so angry, I could just spit."

Don tried not to snigger as he listened patiently to the lady's plight. Her story wasn't a new one. He heard something like it about once a month. He couldn't help wondering why people didn't pay better attention when they were recording their safe combinations. A "safe place"

wasn't much good, if that meant even the home owner couldn't find it. When he reached the lady's house a few minutes later, she greeted him eagerly.

"Like I told you, we bought the house a few months ago, and the safe came with it," she explained again, as she ushered Don into the house.

"I was so sure I put the little slip of paper the former owner gave me in my desk drawer, and the new combination with it, but we can't find either one of them anywhere."

She led the way to the sun room at the back of the house. A vacant space in the far corner told him that was probably where the safe was located. Sure enough, beneath the thrown-back rug a large, square floor safe with rotary dial had been securely set in concrete, probably back when the house was built. Don was just settling into some serious safe penetration when the customer ran into the room waving a small piece of paper and squealing with delight. "I found it, I found it, I found it!" Don didn't even ask where it was. He didn't want to know. He simply collected his tools, accepted his trip charge, wished the customer well, and suggested next time, she put the combination in a safe place for future reference.

One day a locksmith friend of ours was serving as his own dispatcher-office person when a lady called, asking, "Is your name Dennis?" He said it was. Like the aforementioned customer, she told him she and her husband had recently purchased a house that had a built-in safe. However, in this case the seller hadn't been quite so accommodating. The new owners were left with no combination for the safe.

"I found the name of a safe company in California on the safe, along with a serial number, so I called information and finally got hold of them to see if they could give me the combination," the lady said.

"They told me to call you and get you to call them with the serial number, and they'd give the combination to you. Can you do that?" "Sure. For a fee."

There was a little paused on the line. "How much do you charge?" she finally asked.

"Depends on what all is involved. You're looking at a basic service charge for me to bring you the combination and be sure it works. Then, if there's any problem running it, you may need me to service it, so it won't freeze up on you later. That means an added service charge. Sometimes, when we get a combination like that, it doesn't work at all, and that presents a different set of problems."

"Why would that happen?"

"There could be any number of reasons. For example, the safe company may not have the right combination on file, or somebody may have had the combination changed, somewhere along the way."

"No, no, the guy at the safe company told me that in eighty per cent of the cases, the combination has never been changed." "Anyhow," Dennis continued, "There can be reasons it won't work, in which case, if you want the safe opened, I may have to drill it. That costs even more."

More silence on the other end.

"Tell you what," Dennis said.
"I'll make the call and get the combination, then I'll come out and see if it works. You pay me up front for the service call. If the combination works, that's all you owe me. If it doesn't, we'll decide where to go from there."

Dennis got the combination from the safe company and drove to the lady's house, as agreed. She met him at the door and showed him the safe, hidden away in a closet. Dennis groaned, dreading the possibility of having to work in such cramped quarters. He took the combination he'd been given and ran the numbers. No go. He ran them again. No go. He tried reversing some of the numbers, then changing easily mis-read numbers like a two in place of a three, or a one for a seven. Still nothing. The customer was beginning to fidget nervously.

"Did you do that right?" she asked.

Dennis tried again without answering.

"Are you sure that's the way to do it?" she asked.

"I'm positive," he answered.
"This number simply isn't opening the safe, and I'm not finding any variation of it that works, either."

"Let me try," she said.

"Go right ahead," Dennis said.

Pushing Dennis aside, she crawled into the closet and began trying to run the combination, herself. He crawled out of her way and watched as she ran it, and ran it, with no success. Finally, he

asked, "Do you want me to try another way of getting it open?" She didn't answer, but kept running the numbers over and over again.

"I could probably drill it and get it open," he offered, but she didn't stop what she was doing.

Dennis stood, put on his cap, and stepped back. "If you don't need me any further, I guess I'll be going."

She waved one hand in the air and continued turning the dial. Dennis hadn't yet been paid his basic service charge, but he decided to let it go.

"Okay, then," he said as he backed away, "Bye."

As he drove home, Dennis began to mull over the events of the afternoon. "What'd I do wrong?" he asked himself. He'd spent a lot of time trying to help the lady get into her safe and got paid zip. Granted, he hadn't opened it, but he'd warned her the combination might not work. He'd even made it perfectly clear that he expected "Money up front" for a basic service, regardless. He hadn't collected even that. Well, he decided it had been his own fault. He shouldn't have left without getting paid what they'd agreed on. Next time, he'd get the basic fee from the customer, going in. Then, if he saw it would cost more to continue, he'd stop and tell the customer, "If you want me go on and do such-and-such it will be this much more, or I can stop now, for what you've already paid me." That's what he should have done today, he decided. Next time, for sure.

Many thanks to Dennis Copeland of Around Town Locksmith in Brownsville, Texas, for sharing his experience.



hat is in a name? The name of this safe is meant to intimidate a would be burglar, illegal safecracker, or Yegg. (A Yegg is an old term for safecracker often used in crossword puzzles.) The name "Wells Fargo Armored Magnum Safe" does have a hefty ring to it, but it does not live up to its family name. You would not know that just by looking at the unit, however. It does not at first glance look like a simple safe, but looks are deceiving. Let us look at it and talk our way through a classic opening of this unit.



1. Double Door Wells Fargo Magnum Safe.



by Dale W. Libby, CMS

Photograph 1, shows a double door over and under configuration of this rather large safe. One of the theaters I service has been broken into several times and for a while; they did not have any safe on the premises. This was too much of a draw to the burglars and robbers in this suburb of Chicago. The last time they were robbed, they even caught the culprits on video, but never actually caught the gang of kids that robbed and beat the old Allied

Gary money chest to death. It ended in a junkyard eventually.

The owners of the theater eventually were supplied a new locked safe with no combination. This was how the Wells Fargo safe eventually arrived at this location. I quoted a price for opening the top door, and an additional price to open the bottom door at the same time. The bottom door also incorporated a LaGard 2200 key lock. The broken key was stuck in the lock and the key lock was open. There was no known combination for either safe doors.

The manager of the theater (an old friend) opted to only open the

upper door. If there was enough room for the coin travs and opening cash, then that is all they needed. If not, then I would also have to open the bottom door of the safe. It all depended on what was in the upper compartment. The upper compartment did have enough room for the



2. Upper door detail. Fink and Dobias have been here before me.



3. Dial pulled easy. Dial ring held on by 10/32-inch screws.



4. Detail of Wells Fargo Armored Magnum Dial.

trays and cash, and even a sunken compartment, which held a lot of rolled coins. There was also a roller bin (which I sealed off) to deposit money in the lower compartment. I sealed it so money could not be accidentally sent to the lower locked unit.

In photograph 2, we see a close up of the door, handle, and dial configuration. The handle looks like a Diebold handle. The dial and ring were custom made. The distance between the center of the dial and handle is 5 inches. It looked like the lock was mounted right handed (horizontal left). That was going to be my first guess, but circumstances dictated a little compromise to that attack posture. Before we go on. the stickers on the door included Lock and Safe companies that I have known from Chicago. We were on a friendly basis, but our paths did not cross to often.



5. A modified template #1 (StrongArm).

The sticker above the handle was from Fink Safe & Lock in Chicago. I have known Bob McGowan for many years. This was his family's company. I always had a good time with Bob. and even traded a Salamander Safe with him in times past. The riveted plate above the dial was from another large safe company that I have bumped into during my 45 years of safecracking. It was from Paul J. Dobias Safe Company on the south side of Chicago. He was T.H.E. Safeman. THE stood for Twenty Four Hour Emergency Safeman. That was clever and memorable. Although I do not see these other safecrackers too often anymore, we have a friendly relationship for the most part.

Pulling the embossed dial was accomplished with my old

#### The Desktop Dispatcher

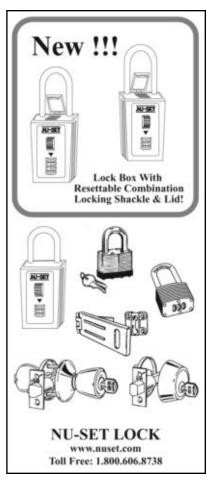
Track your calls on your computer.

- Create it.
- · Track it.
- · Print it.
- E-mail it to techs.
- Store it to build service history.
- Invoice it.

Starting at \$250.00

For more info and a free demo call 561-714-5240 or visit www.DesktopDispatcher.com

Circle 336 on Rapid Reply





6. Du-Drop Tool from Advanced Safe (Advancedsafe.com).



WARRANTY
THIS UNIT HAS BEEN MANUFACTURED ACCORDING
TO INTERNATIONAL SPECIFICATIONS FOR TWO
HOURS, OF PIRE AND EXPLOSION AT 1855° E
DROP TEST 1470° F
D. R. PLATE IN LOCK AREA

8. Label gives test and fire rating.

Lockmasters dial puller. The cup has three hardened screws. Newer pullers have 4 screws, but this old "Reliable" puller worked easily on this special embossed custom dial. *Photograph 3*, is shown to indicate that a little customization had to be used to attach a template to this unit. The screws that held the dial ring were 10/32-inch screws, and not the regular 8/32-inch screws we are all accustomed to seeing for this ring attachment duty. The pulled dial is shown in *photograph 4*.

The center of the dial has a stylized "M" in the center with the legend "Wells Fargo Armored Magnum" around the top and bottom. There is also a wafer cylinder lock used to lock the dial.

Factory templates are drilled to accept 8/32-inch cap screws. Since the dial ring attachment holes were drilled on this unit to accept 10/32-inch screws I had to slightly alter my template. I decided to drill out my template



9. Manufacturer details for South American made unit.

holes at the "E" and "W" location. These are the holes that attach the template for an "N" or "S" mounted lock. (A vertical Up or Vertical Down mounting pattern) I drilled these locations with a 3/16-inch drill bit. This allowed the 10/32-inch cap screws to fit nicely. I did not drill for the heads of the screws, so when I need these holes again, the 8/32-inch screws would fit nice and tight. I carry a large selection of cap screws for these templates. Even though the tops of the screws would be above the template surface, they did not hinder the attachment of the drill holding fixture to the base of the template. *Photograph* 5, shows the attached base template just prior to drilling.

When using a template, the hole will be exactly on or 25, 50, or 75 numbers off the drop-in position of the drilled hole. If the combination lock is mounted vertical down, then the hole I drilled would have shown the edge of

the wheel pack and the end of the locking lever. All that was needed was to turn the gates on the wheels to line up under the lever and the lever would drop and the safe wheel gates would pull the lever to the open position with a last turn of "Right to Stop." This was not the case, however. My gate readings would have to be transferred to the correct position for the lock to open.

I accomplished this easy task with the help of the Du-Drop Tool. This tool and a lot of other exciting safecracking equipment and scopes are available through AdvancedSafe.com in Novato, California. The company is run by Ken Doyle. He is one of the good guys and has a lot of first-rate items used for safecracking. Check out the fast loading website for pictures and details.

Remove the drilling template and attach the DU-Drop Tool to the end of the spindle. There are two Allen head set screws to



10. Lock and handle detent locked.

achieve this. Once the tool is attached, make a line near your drilled hole. You can see my line up [clockwise] about 7 numbers from the drilled hole. The placement of this line is not critical, but it should be near your drilled hole. Now using an Otoscope or straight view scope, line up the gates and record their positions at the original mark that you made on the safe door.

Let us imagine that the lined up gates are with the combination 25-90-45. This is the only combination we will need. This is not the actual combination. but a relative sequence that we must transfer to the True Center of the lever. Set the Zero "0" of the Du-Drop tool at the first line you drew and make another line at the 25 mark (on the safe door). What you have done is to move all three wheels and gates 25 numbers to a new position. Again, you dial the 25-90-45 combination to this new mark. At this point, the lever dropped and the combination lock opened. If the door did not open, you must make another mark 25 numbers from the marks you have already used.

Many times I will not drill at the drop-in position and use this transferring tool to open the lock. There is no chance to mess up the lock lever by doing this, and if you are careful, you can use the



11. Close up of 3330 lock with no relocker wire installed.

lock again once it **installed.** is cleaned up and deburred. Some customers are dollar conscious and will appreciate not having to buy a new lock. If the old lock is questionable, then you must install a new one.

*Photograph* 7, shows the back door of the opened Wells Fargo Magnum Armored Safe. There are only two bolts holding this door closed, one at the top of the door and one at the bottom. There are no UL Labels on this safe. Photograph 8, say's that "This unit has been manufactured according to International Specifications for two hours of fire and explosion at 1850 degrees Fahrenheit. Drop Test @ 1470 degrees Fahrenheit at 30 foot height. D. R. (Drill Resistant) Plate in Lock Area."

Photograph 9, says that the "MAGNUM by Wells Fargo Armored Service Corporation, Manufactured by Hidromex, S. A. Exclusively for W.F.A.S.C., Atlanta GA, U.S.A. Model, Serial, Made In Mexico."

The drill resistance plate was not that hard at all. A StrongArm bit went through it like it was not even there. *Photograph 10*, shows the LaGard 3330 mechanical combination lock and the handle detent bar in the locked position. In *photograph 11*, we see the handle turned and the two bolts in the open position



12. Handle detent when door opened.

with the detent bar holding the handle cam in the open position until the door is closed. *Photograph 12*, shows the 3330 combination lock in close up. Note the anti-fish plate above the wheels and the absence of a relock wire in the lock. I installed a brand new lock and reused the Magnum dial and spindle to keep the front of the safe consistent.

With the advent of companies putting their labels on any safe they want to, it is important to look at all safes with a critical eye and not be fooled by what it says on any label or dial. How many times have you been asked to open an S&G Safe or a YALE Safe? Use your best judgment.

Transfer those readings, Open & Prosper! ILL

### TECHNITIPS

# YEAR-END PRIZES



**Grand Prize**Silca Bravo Duplicator



1st Prize HPC's 1200PCH Punch Machine



**2nd Prize**Kaba Access Control
E-Plex E-5031



SDC Magnetic Lock, Keypad and Exit Switch



4th Prize
Securitron 12-Volt Unlatch Plug in
Trans & Touchpad Retail Value \$650



5th Prize
LaGard "SmartLinc"



6th Prize
Detex Advantex



**7th Prize**Arrow 400 Series Alarmed
Exit Device & S-75 Mounting
Plate Kit for Narrow Stile
Aluminum Doors



\$500 in ASP Auto Locks



9th Prize \$500 in Strattec Auto Products



10th Prize
Tech-Train "Jiffy Jack"



11th Prize
Sargent & Greenleaf 6120
Electronic Safe Lock



12th Prize
High Tech Tools
2004 Pro Set



Major Manufacturing's HIT-111 Drill Guide



14th Prize
Baxter #90 10-Cut
GM Try Out Key Set



15th Prize
Sieveking Products
Squeeze Play



16th Prize
A-1 Security
Manufacturing
Installation Jig



17th Prize
Keedex Sampler



18th Prize
Framon
Impressioning
Handle



<u>19th Prize</u> Gator Tool Multi-Purpose Facecap Tool



Peterson Picks,
by Peterson Manufacturing

Tips Start on Next Page



#### Prizes Awarded From These Companies Every Month!

A-1 Security Mfg. Corp.

High Tech Tools

HPC, Inc.

ILCO

Keedex, Inc.

LaGard, Inc.

Lockmasters, Inc.

Major Mfg.

Sargent & Greenleaf, Inc.

Sieveking Products Co.

STRATTEC Security Corp.

Wedgeco International

#### E-MAIL YOUR TIPS AND WIN! Natllock@aol.com

#### Send in your tips, and win!

#### **How To Enter**

Send a tip on how to do any aspect of locksmithing. Certainly, you have a favorite way of doing something that you would like to share with other locksmiths. Write your tip down and send it to:

Jake Jakubuwski, Technitips Editor, The National Locksmith 1533 Burgundy Parkway

1533 Burgundy Parkway Streamwood, IL 60107-1861

Or send your tips via E-mail to: Natllock@aol.com

#### **Rules & Regulations**

Each tip submitted must include your full name, street address (no P.O. Box numbers), city, state, zip code, phone number, fax number and e-mail address When sending tips via e-mail make sure to include complete address and phone.

#### **Every Tip Published Wins**

If your tip is published you will win one of the monthly prizes listed. At the end of the year, we choose winners from all the monthly tips published, that will be awarded one of the fabulous year end prizes. All you have to do to win is enter.

Prizes are arranged according to suggested retail price value.

# **Prizes Awarded From** These Companies **Every Month!** RPORATE SARGENT AND GREENLEAF A lock on security Sieveking Products Čo. *NEDGEC*

#### A Few Words From Jake...

If you've been following along, most of you are aware that at the beginning of the year I launched Pure Jake Learning Seminars to help North Carolina locksmiths meet their continuing educational requirements as dictated by the North Carolina Licensing Board.



by Jake Jakubuwski

Since in North Carolina locksmiths are now required to be registered and licensed, it has been decreed that they also (as most other licensed trades) be required to maintain a certain amount of classroom time each year (eight hours) to keep their license current.

As can be expected, there is a certain amount of grumbling from some quarters about the educational requirements, but surprisingly; I find that most of the locksmiths that attend my seminars are eager and willing to spend the time, effort and money necessary to comply with the Board's mandates!

Why do you suppose that is?

I think it's because in general, locksmiths are really hungry for good, solid information on how to function competently at any level of almost any aspect of our craft. They're anxious to learn interchangeable core service and repair. They're excited to learn about Total Door Service. they're enthusiastically embracing the basics of Electronic Access Control and the automotive transponder technology that is becoming more and more prevalent in our chosen field of endeavor. And, I also believe the majority of locksmiths recognize that the marketplace is changing and that forces beyond the locksmith's control are mandating that the locksmith move up to higher levels and more sophisticated tasking than simply rekeying mechanical locks and cylinders.

No one else can deliver solutions for customers like locksmiths can. We are masters at providing on-site, on-target answers to security issues. I don't think anyone can hold a candle to us when it comes to doing what we have traditionally done better then anyone else—solve real-time security problems in a real-time manner.

I think today's locksmith is eager, willing and able to carry our centuries old craft of service and concepts of honor and honesty into a rapidly changing arena of security services—even when it is necessary to obtain more education to do so.

See y'all next month!

#### A Slick Tool Trick

When using MCOT car opening tools, it can sometimes be really difficult to get the tool pass the weather-stripping into the inside of the vehicle's door. What I have found—which seems to work best for me-is to use liquid soap that comes in the small bottle with the pump.

Put a small dime size amount on your fingertip. Then, rub the soap on the top of the bend and about halfway down the sides of the tool. This acts like a lubricant and allows the tool to easily slip between the weather-stripping and the glass.

I bought a bottle for 78-cents at Wal-Mart and it seems like it has lasted forever. I tested it on my two vehicles and it doesn't harm a thing. Once it dries, you can't even tell it was on the weather-stripping.

> David Green Mississippi



#### Adams Rite Trick

Several times I've had problems removing or re-inserting mortise cylinders in aluminum doors. Some have given me so much trouble I thought they were stripped.

The other day I had one that absolutely gave me a fit as I tried to install newly keyed cylinders. I had no problem taking the old cylinders out, I just couldn't get the cylinders installed properly. Then I remembered the trick about loosening the lock retaining screws before trying to remove or install a cylinder—worked like a champ! The cylinders went right in just as smooth as silk and lined up perfectly.

David Craig Illinois

Editor's Note: David, there seems to be no end to miss-cut stile preps on aluminum stile doors. And that's what causes the problem of removing the cylinders for rekeying and replacing them after rekeying. The cross-bores are misaligned. Sometimes, the misalignment is slight and does not bind the cylinders to the point where they cannot be easily removed, but will give you (as you found out) the Devil's own time when you reinstall those cylinders.

#### **Double Header**

Here's a couple of tips that has made my life a bit easier.

In my van I carry several sizes of taps and drill bits along with different length screws for each that I use the most. When I get low on screws I go to storage containers looking for replacement screws. To expedite finding screws of the exact size and thread needed I made a template. Using a piece of 1/4-inch scrap metal I drilled and tapped each size and marked them.



Illustration 1.

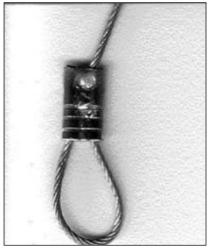


Illustration 2.

Now when I am looking for a certain

screw I just try them out in the template, (see illustration 1).

I have a Keedex Lever K-22 under the door tool. It comes with a wire covered in plastic. The plastic finally wore, split, and came off in places. Then the exposed wire curled up like a pig's tail and the tool became nearly impossible to work with.

I went to the builder's h a r d w a r e (Lowe's) and purchased 4-feet of 1/16" stranded wire which cost 76-cents. Using two <sup>3</sup>/<sub>4</sub>" pieces of small diameter aluminum tubing I made a loop on each end of the wire and pressed the tubing on to the wire in my vise. Attached the new wire to my tool and now I have a wire which will not break, unravel, or have the plastic to wear away, (see illustration 2).

William T. Allgood South Carolina

#### Homemade Button Grabber

I've been meaning to submit this tip for a couple of years. I made this tool to pull up buttons when they are not straight and slick. I used a ½" outer diameter copper tubing because I couldn't find ½". Stick a small drill bit shank into the business end of the tool and use a vice grip to crimp the rest of the tip of the tool.

Drill a hole in the flattened end of the crimped part of the tool. Run a length of heavy-duty fishing line through the tool and tie it off at the drilled hole. (see illustration 3).

# PROFESSIONAL KEY CODES, Inc.

- ALL Domestic vehicles (GM back to '88!)
- ALL Foreign vehicles
- · MOST big rigs and motorhomes
- ALL CODES IN 1 HOUR OR LESS!
- "Rush" codes in 10 –15 minutes -NEVER an extra charge!
- "In-the-field" call-ins... no problem!

ALL CODES GUARANTEED TO WORK!

Call today for our FREE start-up kit **888-456-1888** 

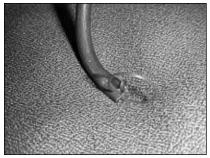


Illustration 3.

You now have a tool you can insert into the vehicle to lasso the lock button. Bend it to suit

your needs, lower the tool over the button, pull up on the line and pull up on the tool to unlock.

> Fred Gamble E-mail

#### Follow That Follower!

To keep my follower from flying around my van yet keep it within easy reach, I use the following method.

I take two small strong magnets (old hard drive

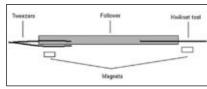


Illustration 4.

magnets, or speaker magnets work well), my tweezers and my Kwikset tool (flat steel type). I place the magnets on the top of my pinning kit and put one side of my tweezers in the follower.

The other end of my follower is held in place by my Kwikset tool. The magnets are spaced apart just enough to hold the middle of both the tweezers and the Kwikset tool. This prevents my follower from sailing through the air when I hit a big bump and keeps my most used pinning tools handy, (see illustration 4).

Ian Greene Kentucky

#### Caravan Tailgate Tip

The tailgate locks on the mid to late 1990's Caravans often gets corroded so that the key won't turn. It can easily be fixed once you remove the handle and lock assembly.

But getting the handle out is a problem 50% of the time because the plastic mounting bolt breaks instead of screwing out. In fact, what looks like a plastic bolt is actually a plastic extension pressed on to a steel nut. This nut screws onto a steel bolt that comes out from the rear of the handle. If the plastic part breaks then drill out all the rest of the plastic until you hit the metal bolt. The outside of the nut is round, not hex, so a socket wrench won't help you.

First, try to use needle nose pliers or angled pliers to remove the nut. Because of its awkward position (between the inside and outside door skin) this probably won't work. If it does not work then drill the nut. Use a 3" length of ½" copper tubing and place it over the nut/bolt to guide the drill bit. Use a ½" bit and drill the side of the nut (don't drill the bolt in the center).



DISTRIBUTORS, INCORPORATED

30 Edmond Street, Hamden, CT 06517

203-865-8106 (Local) • 877-908-5625 (Toll-Free Fax)

1-800-547-5128 (CT Wats) • 1-800-233-2146 (National Wats)

Once one side is drilled then repeat on the other side. Use a large screwdriver to break the nut off the bolt. Now you can remove the linkage through the same hole (two linkages if it is electric). Slide the handle left & pull to remove. Repair the lock (cap is reusable). Upon re-assembly a ½" hex nut will replace the old nut.

Michael Spencer Ontario, Canada

#### Neat Steelcase Trick

As an institutional locksmith I service hundreds of Steelcase desk locks. I was presented with the task of changing one cylinder plug that was keyed different, to one matching all the rest of the fixtures in this particular office.

After examining the replacement plug (that was supplied by the furniture supplier) I noticed that the plug had a wafer style retainer. Using a feeler pick (straight with squared end) I depressed the retainer and used a broken key extractor to pull the cylinder plug without any major difficulty.

To install the new plug depress the retainer wafer and push the plug into the housing.

It used to be that if you needed a replacement lock for a Steelcase desk you had to order one from either the factory or from an office supply company and it took forever.

Now Chicago Lock makes the P1076 Series (Combinated) replacement cylinder plug and the CP1076 (uncombinated) available in four keyways (K101–K104) as well as a removal tool. (K-100 RK 68). Hope this helps you as much as it has helped me.

Rich McNamara Indiana

#### **Vertical Rod Follower Tip**

I recently replaced a Cal-Royal vertical rod surface mounted exit device on a church door. I put all the parts in my van meaning to take them out when I got home—well that didn't happen right away.

The next day I was on a rekey job and couldn't find my followers,

and I couldn't think of what to use. I tried a small screwdriver and I tried a piece of rolled up cardboard I just couldn't get it right.

Spotting the vertical rod device from the previous day, I thought that the rod from the device might make a good follower. It seemed to be about the right diameter. It was, and it did!

Now I have a long follower for working with multiple cylinders and for master keying several locks at a time. I also have cut part of the rod down to make followers of various lengths!

If we're not in a big hurry to dump stuff and throw out all the used parts, some of it just might save you some time and money.

> Daniel Meggison, CRL Michigan

#### Make a Note of This!

Here's a way to make a low cost sleeve to use with long reach (Across the car tools) to protect



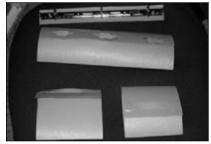


Illustration 5.

the finish on the vehicle and help make your job easier.

Go to an office supply store or Wal-Mart and buy a 3-ring binder

made out of plastic and cut the covers off. You can than cut each of those pieces in half to make a total of four sleeves: or just leave them intact and have two sleeves, (see illustration 5).

Fold each piece in half and use Duct Tape to hold the shape. To help maintain the shape, I cut an "A" tab and a "B" slot, insert the tab in the slot and then use the tape to hold everything together.

If the binders are too thick to work well in tight window/door

configurations, almost any type of plastic sheeting will work well as long as it is rigid enough to maintain the sleeve configuration and allow the tool to pass through without bending or tearing.

> Rodger Long Illinois

#### 2005 Chrysler Sebring Trunk Opening Trick

Keys for the 2005 Chrysler Sebring Convertible were locked in the trunk. Here's how I opened it.

First, I opened the fuse panel on the dash to the left of instrument panel. Next, I pulled out the fuse in the middle that looks like a plastic fuse puller tool. As I pushed the fuse back in place, I pushed the trunk release at the same time and the trunk opened.

I find this a really easy way to open a locked trunk on this vehicle.

Bill Partington Florida

#### **GM 10-cut Ignition Fix**

This is a quick tip to fix a GM 10 cut ignition.

I have received quite a few calls where folks have not been able to turn their key in some of the newer GM 10-cut ignitions. What I have commonly found is that the number one wafer is stuck in the down position—although I have occasionally found the same situation in the two or three position as well.

What I do is use an HPC EZ-2 extractor pick, with a nice sharp point and lift the stuck wafer. Once the wafer has been raised, I can usually insert the key, turn the cylinder, remove it and remove and repair the cylinder. I've found that if I remove the cylinder, clean it and lubricate it, there will not generally be any further recurrence of the problem.

I think that the basic problem is either too many keys on the key ring weighing the ignition key down and twisting the first wafer, or it is simply dirt and debris getting into the cylinder and causing the plug to bind.

> Christopher Tardiff Oregon





Get used to our market momentum! Lockcraft keeps your sales moving with our ever-expanding lineup of automotive locks, keys and service tools. Ask for all the OEM quality replacements you need -- for Ford, Daimler-Chrysler, Nissan, Honda, Toyota, and more. Yes, Lockcraft is still priced tight and right. Yes, Lockcraft still boasts 5-day/90% order fill. Yes, Lockcraft still offers the best profit opportunities in the business for you. Surge ahead with Lockcraft!



2345 N. Central Avenue Brownsville, TX 78521

Phone: 965-838-2480 FAX 956-838-1796

#### Dry Lube Aids in **Picking Cylinders**

I've found that using a dry film type of lube like Super-Lube Dri-Film works very well in expediting the picking of locks and making them function better.

Repeatedly, I've stubbornly picked and picked and picked on some locks with no results until I squirt just a small amount of this lube in the lock, and most times the lock will open right away.

This type of lube is non-oily and not at all messy. Graphite tends to build up in a lock causing a nasty mess on someone's white carpet when the lock is removed. Oil based lubes leave a nice oil coating on the key, which then transfers to anything the key comes in contact with.

The newer generation of Dry Lubes seem to eliminate all of those problems.

> Tom Richardson Washington

 $\mathbb{R}$ 





### Your One Source for



#### **Quality Hardware**

Dor-o-Matic **lves** LCN Locknetics Monarch Schlage **Von Duprin** 

#### For product application and availability please contact your local SDI distributor.

Hans Johnsen Company Dallas, TX Phone: (214) 879-1500

Toll Free: 1-888-879-1500 FAX: 1-800-967-4250

K-D-L Hardware Supply, Inc. Seattle, WA Phone: (206) 682-7383

Toll Free: 1-800-926-7716 FAX: 1-800-524-9305

Jo-Van Distributors Scarborough, Ontario Phone: (416) 752-7210 Toll Free: 1-888-752-7210 FAX: (416) 752-3845

**Doyle Security Products** Phone: (612) 521-6226

Toll Free: 1-800-333-6953 FAX: (612) 521-0166

Robert Skeels and Co. Carson, CA Phone: (310) 639-7240 Toll Free: 1-800-734-4539 FAX: (310) 639-7569

Fried Brothers, Inc. Philadelphia, PA Phone: (215) 627-3205 Toll Free: 1-800-523-2924 FAX: (215) 592-1255

SECURITY DISTRIBUTORS, INC., Dallas, TX

### BUSINESS BRIEFS

#### UIP Names New Vice President

Michael A. Nowakowski has been named Vice President of Sales and Marketing for Universal Industrial Products, Inc. Mr. Nowakowski will be responsible for sales and marketing of all the company's product lines, including SOSS Door Hardware. He joined Universal Industrial Products, Inc., two years ago as National Sales Manager.

For more information contact Michael Nowakowski at: (419) 737-2324; E-mail: mnowakowski@soss.com.

#### LSI Selected for Cargo Training

The International Cargo Security Council (ICSC) has selected Lockmasters Security Institute (LSI) to be its official training partner. As a college accredited institute, LSI has developed a program of 12 courses to graduate Supply Chain Security Specialists. However, students may enroll in the individual courses without being obligated to enroll in all 12. LSI will offer these 12 new courses beginning in April 2005, at LSI's newly expanded facility in Nicholasville, KY, as well as in the major port cities of Mobile, AL, Baltimore, MD and Long Beach, CA. LSI has been training security professionals for 50 years.

For more information visit LSIeducation.com.

#### Securitron University on Demand

Securitron Magnalock Corporation is offering a series of electronic locking system courses custom designed to meet your specific needs. Securitron will come to your location and train your personnel, installers and customers on all the aspects of putting together electronic locking systems.



Courses include:
Electrical training, site
survey and design,
electronic locking
products (SOTAS), life
safety codes and
installation of electronic
locks. Each course
requires approximately
two hours and is now
accredited by the
National Training
School for continuing
education requirements.

To set up your own Securitron University session, contact your local Securitron rep or contact Mark McBroom at markm@securitron.com. 1-800-624-5625.

#### Bianchi Appoints Reynolds, Skowron

John H. Reynolds has been named president and Joy Skowron has been named director of sales for Bianchi USA. Reynolds brings over 30 years of manufacturing experience, including experience with smaller companies and high growth situations. In addition, Reynolds previously served as president for Silca USA and holds a BS degree in Engineering from Cornell University and an MBA from the University of Michigan.

Skowron brings over 27 years experience in the automotive industry, including extensive experience in automotive aftermarket sales and locksmith education as well as a background in manufacturing, quality assurance and engineering.

#### Boyle & Chase Stocks RCI

Boyle & Chase now stocks the complete RCI product line of electric strikes, panic bars, power supplies, magnetic locks, and push button locks. The distributor carries all of RCI's functions,



finishes and models, ready to ship the same day as ordered. Boyle & Chase technical sales representatives are available to help with any technical application questions.

Boyle & Chase may be contacted at 800-325-2530. A full line catalog can be obtained by emailing the company at sales@boyleandchase.com.

#### New CEO And President of DORMA

Scott Duncan, has been named Chief Executive Officer and President of DORMA Architectural Hardware.



He will be based out of DORMA's Reamstown, Pa., headquarters and will be responsible for all aspects of DORMA Architectural Hardware's business, including sales and marketing, operations, engineering and product management.

Duncan has also held senior management positions within the Security and Safety Division of Ingersoll-Rand including General Manager and President of Von Duprin Exit Device and Category Vice President Exits, Closures and Doors.

# Buell

John Blankenship







1. There are no codes on this American built 984cc Vtwin sport bike but it is not difficult to originate a kev.



2. This view from the drivers seat shows the ignition/steering lock below the instrument panel and the gas cap on the front of the gas tank.





3. Despite its appearance, the gas cap does not have a sidebar lock. Pick the gas cap 90-degrees counterclockwise to unlock it and then remove it by lifting it straight up. Resistance friction is stiff, even when using the key, because you are turning a lot more than just the plug. A strong turning wrench is necessary to overcome the resistance. There are a few degrees of play in the plug so use a screwdriver to turn the plug as far clockwise as it will go. Then use the turning wrench to apply counterclockwise turning tension until the plug turns a few degrees. Now you know how much force is needed to turn the plug. Apply at least this much force while you pick the lock. This lock picked easily using a rake but you have to know where to rake.

The photograph shows the gas cap as it appears when you are sitting on the seat. Insert the tension wrench into the top of the keyway and apply tension counterclockwise. This will open the dust shutter so you can see the first tumbler. It is in the bottom of the keyway on the left side and does not extend all the way across the keyway. Use the pick to depress the first tumbler and you can tell where to rake because all six tumblers are inline on the bottom/left side of the keyway.

This lock impressions well because it leaves good marks and the wafers are strong. Reading the heights of the wafers in the keyway is tricky, as they do not extend all the way across the keyway.



4. The gas cap has been picked to the unlocked position and then lifted out of the filler neck.



6. Place a rag on the far jaw of a vice to protect the top of the gas cap. Place the gas cap in the vice with the enclosed end of the pin facing up as shown in the photograph. Then tighten the vice to push the center plastic piece in against the spring. When the plastic piece was pushed in far enough, the pin fell out under its own weight. It is a good idea to place a towel under the pin in case this happens. If the pin does not fall out, it will be easy to push and/or pull it out.



7. The pin has been removed and the spring has pushed the center plastic piece upward.



5. The assembly on the back of the gas cap, along with the plug, has been turned back to the locked position. Notice that the pin in the center plastic piece is enclosed on the left side but the right side is open. Before disassembly, I used a marker to put a black dot on the left side of the cap. I etched a mark on the tail section of the plug that pointed toward the black dot. I made a note that the enclosed end of the pin housing in the center plastic piece was facing toward the black dot. I also noted that the

word POW on the outside plastic piece was closest to the black dot. I think the plastic pieces can be installed 180-degrees off but I prefer to put them back exactly like they came off just to make sure.





8. The center plastic piece has been removed, revealing the spring.



9. The spring has been removed and the outside plastic piece can be lifted off.



10. The pin, center plastic piece, spring, and outside plastic piece have all been removed.



11. Now you can push on the tail section of the plug to push the plug out the front of the gas cap.



12. The plug is being removed from the gas cap. You do not need to be concerned about the wafers springing or falling out.



13. The gas cap contains all six wafer tumblers. An X270 blank inserted into the keyway shows that the cuts are 113242, which is Zadi code 8053. The green O-ring around the back of the plug came off when the plug was removed. I used a dental hook pick to pull it out of the cylinder and then replaced it where it belonged.

14. If you need to remove the wafers, begin by twisting a small screwdriver inside both facecap crimps to force them out so you can remove it.



15. Remove the dust shutter and both springs. Be careful because the springs can easily spring out and get lost.



16. There is a tinv brass pin that secures the wafers in the plug. You can see the end of it in the center of the plug.



17. Push the wafers down with your finger, tap the front of the plug on a workbench, and the brass rod will slide out far enough to grab. Pull it out and you can remove the wafers.

#### Locksmith Bonding The biggest Bond in the Industry

The National Locksmith offers the largest Locksmith Bond in the Industry, by far. Along with your subscription, you are invited to become Bonded by us. If you are the individual subscribing to the magazine, your Bond will cost only \$17 and expires at the same time as your subscription. If you choose, you may also bond non-subscribing employees for \$25 each.

Your Bond includes a \$15,000.00 personalized and frameable Bond Certificate, and a wallet Bond Card. Many customers insist on hiring only Bonded Locksmiths, so apply for your Bond today!

If you currently have our older \$5,000 Bond, you will be invited to apply for the new one at renewal time. Or if you would like to upgrade now, we will send you the new one for \$17 if you are the subscriber or \$25 if you are not a subscriber.

☐ Subscriber Bond \$17 ☐ Non-Subscriber Bond \$25 *Add \$2 for shipping and handling*	Your NameShop Name	To order Bonds for employees who do not subscribe, attach a sheet with their names, addresses, and phone numbers. Be sure to include \$25.00 additional for each non-subscriber
Return with payment to: The National Publishing Co. 97592 Eagle Way	Address	
	City	
Chicago, IL 60678-9750	State Zip	Bond. You may issue one
Bonds available in U.S. and	Phone ( )	check or money order for the total amount.

Canada only.

OID:3/05



18. The original Buell key is on the bottom. A code cut X270 with cuts of 113242 turned all three locks on the bike.



20. The pin was placed into its hole and then a small punch was used to push it all the way in; it was not necessary to use a hammer.



19. Replace the plug, outside plastic piece, spring, and center plastic piece while making sure they are aligned correctly. Then place the gas cap back into the vice with the opening for the pin facing up. Tighten the vice to push the center plastic piece against the spring until the pin can be replaced into its hole in the tail section of the plug.

#### **Ignition Lock**



21. The ignition/steering lock is shown in the OFF position, which means the ignition is off but the steering is not locked. To lock the steering turn the handlebars to the right or left, push the plug in, and turn it 90-degrees counter-clockwise to the LOCK position. Turning it a little farther to the "P" position turns on the parking lights. It is not necessary to push the plug in when turning from LOCK to OFF.

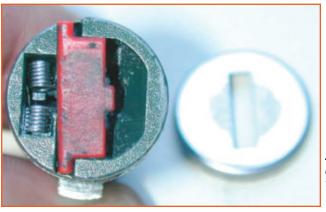
22. The lock is secured by two T-40 tamper-resistant Torx bolts. There is enough clearance so that it is not difficult to remove them so you can pull the lock down and out. Barely visible under a wire loom is one of the two Phillips screws that hold the electrical switch to the back of the lock housing. If necessary, you can remove these two Phillips screws, pull the switch off the back of the lock, and take the lock to a bench.

23. Remove the facecap/sleeve from the ignition lock. Use two small screwdrivers to pry up the locking tabs on both sides of the sleeve and then twist a large screwdriver between the back of the sleeve and the housing to push the sleeve forward and off of the cylinder. The photo just shows one of the small screwdrivers prying up the locking tab but you need to pry up both sides at the same time. It helps to hold the lock in a vice while you do this.



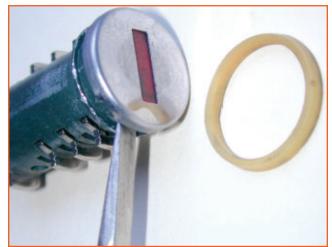


24. With the lock in the OFF position, drill a small poke hole 1.25 inches (31.75mm) from the face of the plug in line with the keyway and on the opposite side from the steering lock bolt. Be ready to stop drilling immediately when the drill breaks through to avoid damage to the retaining wafer. Use a punch or similar tool to depress the retainer and the spring on the back of the plug will push it out slightly so you can grab it and pull it out. You do not need to worry about the tumblers falling out. The lock needs to be in the OFF position in order to remove the plug due to lateral locking grooves in the cylinder that will trap the tumblers and retainer when in the LOCK position. I was able to pick this lock from LOCK to OFF by raking the tumblers on both sides of the keyway.



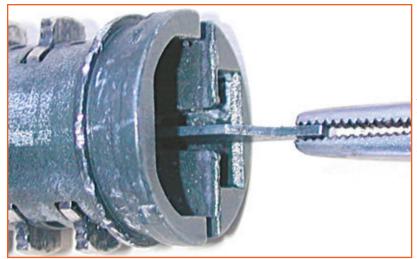


25. The plug contains six wafer tumblers staggered on both sides of the keyway and the wafer retainer that cannot be touched by a pick in the keyway. Insert a key blank and you can read the height of the tumblers to obtain the cuts. The spring in the back of the plug stays in place pretty good but be careful not to lose it.



26. You must remove the facecap from the plug in order to remove the tumblers. Remove the plastic ring and use a small screwdriver to pry up the crimps so you can pull the facecap off.

27. Remove the dust shutter and spring. The rectangular end of the tumbler retainer bar is visible in the gap between the two coiled sections of the spring.



28. Grasp the end of the tumbler retainer bar with forceps or tweezers and pull it out of the plug. Pay attention to which end to insert first when reassembling. Do not allow the tumblers and retainer to spring out and get lost or mixed up.

29. The tumblers are numbered per depth. The tumbler retainer bar is shown on the bottom.





30. The rear compartment lock is located on the left side of the motorcycle and below the seat. Turn it 12-degrees clockwise against spring pressure and lift the back of the rear compartment upwards to free it from the latch. The lock will spring back to the locked position when you release it. I did not see an easy way to remove this lock.

Codes: 8001-9554 (Zadi)

Blank: Ilco X270 (TMC1), Silca ZD23RCP or ZD24RDP

**Spacing:** 1=.146, 2=.256, 3=.366, 4=.476, 5=.587, 6=.697

Depths: 1=.310, 2=.281, 3=.252, 4=.224

**Note:** Most code programs show the following depths because these codes first came out using the Silca ZD10 blank, which is .301 wide. These depths will work but are

**Depths:** 1=.301, 2=.276, 3=.250, 4=.224

**DSD:** 735

Tumbler Locations:1 2 3 4 5 6IgnitionX X X X X XGasX X X X X XRear CompartmentX X X X X X X



31. The rear compartment latch is behind the seat near the rear of the motorcycle. After lifting the back of the rear compartment cover free from the latch, pull it toward the rear of the motorcycle to free the front and completely remove it from the motorcycle.

 $\Pi$ 







The ALOA Convention and Security Expo

# **SWEET**

Get Ready for ALOA 2005,
a powerful resource to explore innovation and
form industry alliances. This year we've thought of
everything from an exciting location, comfortable accommodations and a convention center
that is equipped to handle your every need.

Located just minutes from downtown Chicago, Rosemont, Illinois is the perfect "business village", designed specifically to make your stay convenient, comfortable and above all, successful!

The 49th Annual ALOA Convention and Security Expo offers top-notch classes, workshops, networking opportunities and cutting-edge technology.

And don't miss out on the fine dining and entertainment options that Chicago has to offer. Shop at the world-famous Magnificent Mile. Eat at Morton's of Chicago or Harry Caray's Italian Restaurant. Disit the Navy Pier or catch a ball game. The options are endless when you register today for the single-most important event in the locksmithing industry.

### Baby, you know you want to go!



#### Taking Industry Products for a...

## TEST PRIVE

# The CapSaver Press

#### by A-1 Manufacturing

#### THE NEED:

Anyone that has ever done any work with Interchangeable Core knows the capping of the core is critical to the smooth operation of the system. If the caps are not pressed in enough, they will fly off and compromise the system, or worse yet, disable the door. If the caps are pressed too far into the chamber, the key will not enter the core and that will render it useless.

#### THE ANSWER:

A-1 has long been at the forefront of IC tools and the CapSaver Press is just the latest of their capping tools for IC. For several years, they have had a press to punch individual caps on the cores and it worked very well. The biggest drawback was the time it took to place the caps individually on each chamber as well as making sure they stayed in place while pressing them into the core.

The A-1 CapSaver Press does not use individual caps, using instead a strip that fits into a strip slot and all the chambers are capped at once with one push of the handle. The whole process often takes less time than placing one cap on the chamber did with any previous system.

#### **USING THE TOOL:**

A-1 has designed the CapSaver Press to punch, form and seat caps for Interchangeable cores. The A-1 CapSaver strips are specifically designed for use with the CapSaver Press and use of any other strips may damage the equipment and will void all warranties.

The CapSaver Press must be bolted or clamped to a workbench or other solid base for safety and proper operation. The tool is quite heavy and



needs to be solidly attached to insure it will not tip during use. You really don't want this tool falling on your foot.

Let's look at setting up and using the tool. To set the handle, pull the rubber end of the handle towards you and align the setscrew with the dimple of the shaft and tighten the setscrew. To reposition the handle angle, lower the ram fully; remove the set collar and gear shaft. Rotate the handle to the desired position and reassemble the shaft and attach the collar.

Insert a combinated core into the holding block and place a spring through the top of the holding block into each barrel of the core. Insert a CapSaver strip into the strip slot at the top left hand side of the holding block and drop the center hole of the strip over the alignment pin in the holding block.

Lower the ram by pulling on the handle until the punch fingers are in contact with the brass strip. Use a quick downward thrust to punch and form the caps. Continue to apply pressure until the depth stop bottoms out. Raise the handle and remove the core.

Inspect the core. If the caps are not seated to a suitable depth, use an Allen wrench and adjust the stop as needed. To cap additional cores, rotate and/or reverse the CapSaver strip. Each strip is designed for four cores.

After extensive use, the ram may loosen. Readjust the gibe screws, loosen the hex nut and tighten the gibe screws to just contact the ram and tighten the nuts. Check to be sure the ram moves freely with no excess play. As with any

#### IN SUMMARY:

**DESCRIPTION:** Capping tool for IC cores.

PRICE: \$725.00

**FEATURES:** Uses strips that are made to cap four cores each.

**TEST DRIVE RESULTS:** The CapSaver is fast, exact and clean.

tool, caution and care must be used to assure long life and professional results.

#### **IN SUMMARY:**

I found the A-1 CapSaver Press to be all it was advertised to be. It is fast, exact and clean. The caps are all the same depth when finished and they are flat, not crooked like I was used to from my vise installation I have been using for years. The keys slipped in cleanly and work perfectly.

It was not difficult to adjust the depth of the punch fingers and the desired depth was consistently achieved. The tool is a solid, well-built tool with years of life expectancy, even in the busiest of shops.

It is a quality tool for the capping of Interchangeable Core locks of the small format variety. No loose caps to place in the chambers individually since it uses strips that are made to cap four cores each. The cost of the strips is roughly equal to the cost of 24 individual caps, not to mention the timesavings achieved by using the strips.

#### COST

The tool cost around \$725 retail, depending on the distributor so it is a tool that will require keying a large number of cores to cover it's cost, but the quality of the capping makes this a tool you should consider if you do any IC work.

For more information, contact:

A-1 Security Mfg. Corp 3001 West Moore St

3001 West Moore St Richmond, VA 23230 Phone: 877-725-2121 or 804-359-9003

Fax: 804-359-9415
Email: fmcc@demanda1.com
Website: www.demanda1.com